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LIFESTYLE MANAGEMENT EDUCATION: A CASE STUDY OF
THE CLOSING OF FORT DEVENS

A Dissertation Presented

by

JANET B. SULLIVAN

Submitted to the Graduate School of the University of
Massachusetts Amherst in partial fulfillment of the
requirements for the degree of

DOCTOR OF EDUCATION

February 1998

School of Education

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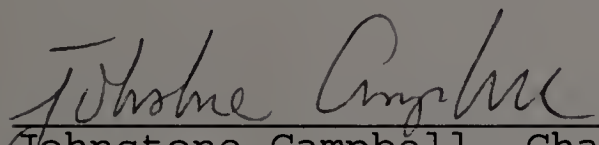
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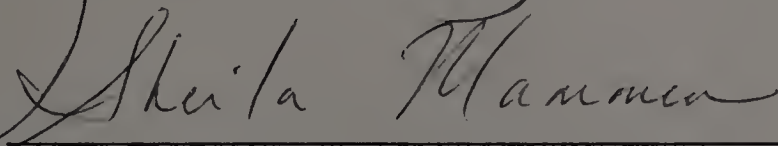
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"Be All That You Can Be" is the Army's recruiting motto. I have been employed by the US Army since 1974. First, I was an Army officer; and now I am a federal civilian employee working as The Equal Employment Opportunity Officer at Fort Carson, Colorado. Throughout the years I have taken this motto as a personal challenge to realize my potential. The call to use my veteran's benefits at the University of Massachusetts to pursue an Education Doctorate in Humanistic Psychological Education was another opportunity for personal and professional growth that I seized. I am grateful to these two fine institutions, the US Army, and the University of Massachusetts, for providing me with structure and content in which to develop my knowledge, talents, skills, and abilities to their fullest. I am proud to have been associated with these great organizations.

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ABSTRACT

LIFESTYLE MANAGEMENT EDUCATION: A CASE STUDY
OF THE CLOSING OF FORT DEVENS

FEBRUARY 1998

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This study examines how civilian workers managed stress at Fort Devens, Massachusetts, after the 1991 Base Closure and Realignment Commission (BRAC) selected the post for closure. The post shut down operations in September 1995, two years ahead of the schedule mandated by related legislation. After the closure announcement in April 1991, a number of events further compounded the problem of base closure. First, there was a deep recession in New England. Second, general downsizing of the federal government and of the Department of Defense, in particular, severely decreased potential job opportunities for many workers. These events created a climate of stress at Fort Devens.

At the same time closure was announced, Fort Devens made available to all civilian employees the opportunity to attend a lifestyle management course called Fit to Win, the purpose of which was not stress management but better fitness through exercise and proper nutrition. This study examines how employees coped with the stress of losing their jobs at Fort Devens, and to what degree the Fit to

Win program was an effective tool in helping them manage their stress.

Qualitative research methods were used. A case study with in-depth interviewing was the primary mode of inquiry. The study was composed of a purposeful sample of six civilian Fort Devens employees who also attended the Fit to Win course of instruction. In addition to taped and transcribed interviews, an interviewer's journal was also used to conduct the research. The findings suggest that Fit to Win is an effective lifestyle management program. All of the participants thought the course content was sound and the results were worthwhile. Those individuals who fully engaged in the program, theoretically and in application, reaped the greatest rewards. The findings also suggest that Fit to Win has varied impact on participants: temporary, permanent, and no change.

Additionally, the findings suggest that a lifestyle management program comprised of exercise and nutritional guidance can effectively help individuals to cope with stress. Furthermore, the findings suggest that Fit to Win education can be a vehicle for successful transition from stress management to lifestyle management, or improved wellness.

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CHAPTER 1

BASE CLOSURE, FORT DEVENS, AND FIT TO WIN

Introduction

This study examines how civilian workers managed stress at Fort Devens, Massachusetts, after the 1991 Base Closure and Realignment Commission (BRAC) selected the post for closure. The post shut down operations in September 1995, two years ahead of the schedule mandated by related legislation. After the closure announcement in April 1991, a number of events further compounded the problem of base closure. First, there was a deep recession in New England. Second, general downsizing of the federal government, and the Department of Defense, in particular, severely decreased potential job opportunities for many workers. These events created a climate of stress at Fort Devens. At the same time that closure was announced, Fort Devens made available to all civilian employees the opportunity to attend a lifestyle management course called Fit To Win, the purpose of which was not stress management but better fitness through exercise and proper nutrition.

The study examines how civilian employees coped with the stress of losing their jobs at Fort Devens, and to what degree the Fit to Win program was an effective tool in helping them manage their stress. The study includes information on base closure, Fort Devens, the Fit to Win program, and stress management education; it includes a

detailed case study of six civilian employees at Fort Devens; this is followed by summary of the findings, as well as conclusions and recommendations.

Chapter one begins by presenting an overview of the BRAC process. It explains reasons for the base closure initiatives, the executive and legislative involvement in the base closure process, criteria for selection, and public involvement. The chapter then gives a brief history of Fort Devens and a description of the facility and work force that were affected by base closure. This is followed by a discussion of the purpose and components of the Fit to Win program. Finally, chapter one describes the methodology and design of the study. It sets out the reasons why a qualitative research study was chosen; outlines the significance, limitations, and biases of the study; and describes why and how the subjects were selected for the case study.

Chapter two reviews the literature regarding stress and stress management. It discusses definitions of stress, types of stressors, symptoms of stress, physiology of stress, control as a key factor in stress, the effects of stress, and stress management education.

Chapter three introduces the six subjects interviewed for the case study, the six subjects telling their stories about base closure in their own words. Through their narratives and the in-depth interviews, the reader comes to understand the experience of base closure more fully.

Chapter four analyzes the interview data and addresses the question, "What insights can we gain about base closure, stress, and Fit to Win?"

Chapter five summarizes the case study findings and presents conclusions and recommendations.

These findings, conclusions, and recommendations are pertinent to many who are affected by base closures. In 1991 alone, thirty-four bases were closed and forty-eight were realigned. Closures made in 1993 and in 1995 cut even more deeply into Department of Defense, and the trend is likely to continue. This study helps us understand how the stress of base closure affects civilian workers, and whether the Fit to Win program is effective in helping them cope with stress. To my knowledge, no other research has been conducted on this topic.

Base Realignment and Closure

BRAC was precipitated by two timely and imperative international events. First, the remodeled world order significantly changed the military threat posed by the Soviet Union and its allies. This has had a monumental impact on U.S. military requirements for manpower, equipment and facilities. Second, the ballooning national deficit provided motivation for both the President and Congress to slash the defense budget. As a result, the Department of Defense planned to reduce the Armed Forces by twenty-five percent by the year 1997. Fewer forces

obviously necessitate fewer bases. By eliminating facilities, the Department of Defense could channel limited funds towards critical military needs. It was expected that streamlining the infra-structure so that it was compatible with the modified force-structure would dramatically improve the efficiency of the U.S. defense system.

On November 5, 1990, President George Bush signed the Defense Base Closure and Realignment Act of 1990. It established the Defense Base Closure and Realignment Commission whose purpose is to ensure an independent and equitable process for closing and realigning U.S. military installations. The Secretary of Defense was given the job of recommending specific military base closures and realignments to the Commission by April 15, 1991. In accordance with the law, these proposals were to be based upon a new force-structure strategic plan submitted to Congress in conjunction with the Department of Defense budget request for fiscal year (FY) 1992. Projected levels of defense funding in the FY 1992-97 time frame and a reevaluation of the potential threats to United States security were the underlying influences behind the force-structure plan. The Bush Administration viewed the changing global political and economic climate as an opportunity to introduce defense reductions. Additionally, Congress demanded massive declines in defense funding. Furthermore, BRAC's initial legislation required the process to be repeated in 1993 and 1995.

The following steps sequentially outline the procedure that was followed for closing bases over a 21-month period:

1. January through November. Each service (Army, Navy, Air Force) collects information on each installation and performs a cost-benefit analysis.
2. January. Recommendations are forwarded to the Secretary of Defense who can make changes to the list. The President nominates eight commissioners who must be approved by Congress.
3. March. The Pentagon publicly announces the BRAC list.
4. March through June. The BRAC Commissioners hold public hearings and add or delete bases to the list.
5. June. The Commission publicly announces the final list.
6. July. The final BRAC list is forwarded to the President who has two weeks to approve it and forward it to Congress. If rejected, the Commission conducts further evaluations, makes changes and returns it to the President for approval and on to Congress.
7. September. The BRAC list is automatically passed into law by default unless it is rejected by Congress within forty-five days after receiving it from the President.

The selection criteria used by the Commission to determine base closure or realignment follow:

1. Current and future mission requirements and the impact of the operational readiness of Department of Defense's total force.
2. The availability and condition of land, facilities, and associated airspace at both the existing and potential receiving locations.
3. The availability to accommodate contingency, mobilization, and future total force requirements at both existing and potential receiving locations.
4. The cost of manpower.
5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of complete closure or realignment, for the savings to exceed the cost.
6. The economic impact on local communities.
7. The ability of both the existing and potential receiving communities' infra-structure to support forces, missions and personnel.
8. The environmental impact.

The 1991 Defense Base Closure and Realignment Commission's recommendations were the outcome of a process that was designed to be open and include public comment. To prevent the Commission from being influenced by partisan politics, input was provided by both community and

congressional leaders. The Commission heard public testimony in Washington, D.C. from members of Congress, Department of Defense officials, and other expert witnesses. Public meetings were also conducted at fourteen other locations. All hearings were open to the public. Transcripts of public conferences and information collected by the Commission were available for public review. Furthermore, every major site proposed for closure was visited by at least one BRAC board member. The Commission gathered viewpoints and data from all of the local communities concerning the effects that closure would have on them before making final decisions.

As a result of the Commission's 1990-91 review and analysis, it was recommended to the President and confirmed by Congress that 34 bases be closed and 48 bases be realigned. An itemized list of bases closed or realigned as a result of BRAC 1991 is in Appendix A.

The Commission was aware that many communities count on these military installations for providing jobs and infusing the local economies with a solid revenue base. However, the Commission believed that communities should be able to successfully cope with the difficulties encountered due to base closures. Many local economies had recovered from previous military base closure initiatives. According to research conducted by the Department of Defense's Office of Economic Adjustment, between 1961 and 1990 approximately 158,000 new jobs replaced almost 93,000 lost jobs caused by

base closures. Further, the OEA provided \$1.6 million in grants to help develop reuse plans for the 21 communities located around bases slated for closure by the 1988 BRAC mandate.

Fort Devens

It is understandable that any organization affected by the decision to terminate operations would be concerned about the possible negative consequences. However, one military post in particular was stunned by its closure announcement. In 1989, Fort Devens, MA, a medium-sized Army installation approximately forty miles west of Boston, had been identified by BRAC to receive a high tech unit known as the Information Systems Command (ISC), based at that time at Fort Huachuca, Arizona. This would have significantly increased the size and value of the Fort Devens military complex.

The excitement began in January 1989 when the Commission broadcasted live via satellite from the Pentagon its list of military installations slated to be closed or realigned. Fort Devens had been fighting similar "hit lists" almost since its inception, but this time the military leaders, civilian employees, and community members all knew that its survival was dubious due to changing times and attitudes about the Armed Forces. However, to the amazement and joy of everyone associated with Fort Devens, there was the surprising announcement that not only would

the post be saved but it would expand. Senator Edward Kennedy (Democrat — Massachusetts) personally called the installation commander, Major General Joseph J. Skaff, to extend congratulations and accept his enthusiastic words of appreciation. Several celebration parties ensued, with federal, state, and local politicians, business owners, private associations, community activists, civilian employees, and military personnel reveling in their good fortune. Many speeches were made reinforcing the importance and vitality of Fort Devens to the Army. Its fate was now secured, everyone thought, and elaborate plans for the future were developed.

It was declared that the post would exchange the U.S. Army Intelligence School for the Information Systems Command. This would amount to approximately a five per cent increase in terms of personnel for Fort Devens, with added units from Fort Huachuca, AZ; Fort Monmouth, NJ; Fort McPherson, GA; and Fort Belvoir, VA. The most important aspect of this realignment was that Fort Devens would acquire a very prestigious and powerful major Army headquarters. The ISC has 42,000 personnel worldwide and is responsible for engineering, installing, operating, and maintaining all of the Army's telecommunications, automation, computer software and hardware, plus managing mail, distribution, publications, records, forms, and any other information services. This mission was considered highly compatible with the surrounding Fort Devens

community, which was populated with technological giants such as Digital and Prime, in addition to more traditional military-industrial corporations like Raytheon, Lockheed, and General Dynamics.

As a result, the Fort Devens budget and workforce were expected to increase along with its status. Three general officers were scheduled to assume command of this cutting edge facility, which would gain approximately 1200 military and 3000 civilian employees. Because of the complexity and vital interest of the type of work to be performed, the pay level of jobs was to be substantially elevated. So more jobs at higher pay was the promise and expectation.

This was followed with elaborate planning and partial implementation of building and renovation projects on post to accommodate ISC. The estimated cost was \$70-80 million dollars. Office buildings, parking lots, roads, the upgrading of electrical systems, and a new commissary and post exchange complex would be necessary to support the new headquarters. Architectural studies were commissioned, completed contracts were funded and approved, and construction commenced. Oblivious to external events, the chicken was about to stop laying golden eggs.

In August 1991, Iraq invaded Kuwait. The United States responded with Operation Desert Shield and Desert Storm. This diverted attention and funds from the realignment project to the war effort. An order was issued to cease construction projects. Furthermore, the day before the

October 1, 1991, change of command ceremony transferring control of the installation to ISC, the ceremony was postponed indefinitely. It never happened. In March 1991, Fort Devens headed the closure list, and realignment was canceled. Shocked, appalled, confounded by the unpredictable turn of events, the Fort Devens work force was forced to adjust to the reality that the anticipated good times would be replaced by grieving. The closure announcement caught Fort Devens completely off guard, marking the beginning of the end for one New England tradition.

Fort Devens terminated operations in September 1995. While 5,382 military personnel were relocated, 2,331 civilian workers lost their jobs.

A short history and description of Fort Devens will help to set the stage for understanding the setting and the situation at Fort Devens. The installation was considered to be a landmark and a major employer in rural New England.

Camp Devens came into existence on September 5, 1917 as a temporary cantonment during World War I. Originally used as a reception center for selectees and later as a demobilization center, it was declared a permanent installation in 1931 and redesignated as Fort Devens, named in honor of Brevet Major General Charles Devens, a Massachusetts native who served as a Union officer during the Civil War, and later as Attorney General in the Hayes presidential administration.

During the 1930s, a building and beautification program commenced with funds and labor primarily coming from the Works Progress Administration and Civilian Conservation Corps. The central area of the installation is now on the National Historic Register and protected in future utilization to some degree.

With the onset of World War II, expansion occurred with 1,200 wooden buildings, two hospitals, an airfield, and a six-acre automotive repair facility. Three combat divisions and the Women's Army Auxiliary Corps (WAAC) trained at the installation. Over 5,000 German and Italian prisoners of war were interned there until May 1946. It was also the site of the chaplain school, cook and baker school, and basic training for Army nurses. In 1946, Fort Devens was put on caretaker status and was used as a University of Massachusetts extension campus.

The Army reactivated the base in 1948. During the Korean Conflict in the 1950s, the fort was again used as a reception center for inductees. Along with this, an intelligence school and a chemical defense school were based there, as well as several other combat units and support organizations. During the Vietnam Conflict, infantry units were sent overseas from Fort Devens. At the time that the base closure was determined, Special Forces, Medical, Engineering, National Guard, Army Reserve, Intelligence, and Band units called Fort Devens home. After the 1991 closure directive, all active duty units were

deactivated or relocated. The military and civilian workforce decreased rapidly, and the base closed two years ahead of the September 1997 deadline.

Left behind were 9,311 acres of land and facilities that included numerous historic office buildings, a small airport, three fully-equipped gymnasiums, a sports arena, a movie theater, three churches, several lakes (one with a beach for swimming), two swimming pools, an officer's club, a community recreation center, a shopping center, a new supermarket, a fire department, a firing range, a parachute landing zone, a hospital, an 18-hole golf course and clubhouse, numerous playing fields, hundreds of family housing units, and a wilderness area with the Nashoba River running through it and deer hunting permitted during season.

Also left behind were hundreds of civilian workers from the surrounding community who did not find replacement employment and who had to cope with the stress of base closure. The state and federal governments instituted out-placement programs that include services such as retraining, career counseling and relocation services. Employees who had worked as librarians, plumbers, engineers, instructors, truck drivers, clerk-typists, doctors, painters, legal technicians, supply clerks, and managers either retooled themselves for new careers in Massachusetts, or were forced to move, or became unemployed.

Fit to Win

Coincident with base closure, Fort Devens offered a program called Fit to Win, an Army-wide lifestyle management program. Department of Army civilian employees, military personnel, and their family members are all eligible to participate in the program. The purpose of Fit to Win is to promote positive lifestyle behaviors. The intended outcome is better fitness through exercise and proper nutrition. The key objectives of the program are to increase awareness of healthy lifestyles, provide individual assessment to identify needed interventions, and target interventions to promote and sustain healthy lifestyles. Targeted areas for interventions are physical conditioning, nutrition and weight control, tobacco use cessation, stress management, hypertension management, substance abuse prevention, spiritual fitness and dental health. Education is provided in physical conditioning, nutrition and weight control, while referrals are made to other professional services for the other areas where intervention is warranted. Today we would call this a wellness program rather than a "lifestyle management" program.

The first step of the process of joining Fit to Win is a health risk appraisal. A six-page questionnaire is completed by each participant. The health risk appraisal instrument increases self-awareness about a healthy

lifestyle, identifies areas of an individual's lifestyle where modification could improve general health and quality of life, and motivates individuals to participate in specific intervention programs. The questionnaire is a personalized, automated tool that collects information about personal and family health history, lifestyle, and attitudes. Height, weight, blood pressure, and cholesterol level are entered into the data base. The result is a personal fitness profile that is discussed with a health care professional, usually an occupational health nurse. The participant's profile is interpreted by the nurse, and the individual is advised about available interventions, such as education, medical treatment and counseling. Each participant must pass this stage before being allowed to join in any Fit to Win activities. See Appendix C for the health risk assessment instrument.

The next phase of the program is eight weeks of intensive classroom instruction and exercise conducted three times a week for one hour. Each session is held during regular business hours. Instruction is provided on physical fitness and nutrition, and participants also have the opportunity to apply that knowledge in practical exercises such as calisthenics, swimming, golf, racquetball, aerobics, weight lifting, walking, and healthy food shopping, cooking, and eating. Participants learn how to determine their targeted weight, energy requirements for weight maintenance and weight loss, daily carbohydrate,

protein and fat requirements, energy expenditures for different activities, training heart rate zones, and muscular endurance. They also learn about body fat composition, low fat food selection and preparation, athletic shoe selection, and safety. A second health risk assessment is administered the last week of class, and changes in weight, cholesterol, blood pressure, flexibility and endurance are documented. See Appendix D for the Fit to Win course itinerary.

The Department of the Army established Fit to Win and offered the program at every active Army installation as an enjoyable way of promoting employees' fitness and health and, at the same time, increasing productivity. The program was put in place at Fort Devens shortly after base closure was announced. Therefore, workers at Fort Devens were not the usual Department of the Army employees enrolling in Fit to Win. Indeed, Fort Devens employees were on the verge of losing their jobs and were thus under a good deal of stress. Fit to Win quickly got a reputation among employees as a benefit that they would lose after base closure, and many people wanted to take advantage of it while it was available. Mainly people wanted to learn more about better nutrition and use the opportunity to exercise during work. Fit to Win was not marketed as a stress management program. Nevertheless, a body of scholarly research, discussed in chapter two, clearly indicates that exercise and nutrition are two primary methods of successfully managing stress.

Therefore, I decided to take a closer look at Fit to Win to determine how people were coping with the stress of base closure, and whether Fit to Win was helpful in managing their stress.

Method and Design

Rationale for Design of Study

The methodological question was this: How could I best understand the stress of base closure and the effects of Fit to Win? I chose qualitative research methodology as the best approach for this investigation, with the case study at the core of the methodology. What follows is an overview of the objectives of this study, and a description of qualitative research and of the case study method.

This study focused on civilian employees at Fort Devens and how they coped with stress. The objectives of the study were:

- A. To understand the stressors encountered by civilian employees who knew they would lose their jobs as a result of base closure.
- B. To find out how these individuals coped with stress.
- C. To discover whether Fit to Win had been perceived and/or utilized as an effective tool in managing stress for these workers.

Qualitative research was chosen as the method to conduct this study. I deliberately decided against quantitative research because I wanted to study a specific and small group of people at Fort Devens, experiencing traumatic and dynamic changes in their lives. I wanted to discover how stress was affecting them and their reactions to the Fit to Win program. Quantitative research methods would not provide me with those results. In many ways, the real trade-off between quantitative methods and qualitative methods is a trade-off between breadth and depth.

Qualitative methods permit the evaluator to study selected issues in depth and detail; the fact that data collection is not constrained by predetermined categories of analysis contributes to the depth and detail of qualitative data. Quantitative methods, on the other hand, require the use of standardized stimulus so that all experiences of people are limited to certain response categories. The advantage of the quantitative approach is that it is possible to measure the reactions of many subjects to a limited set of questions, thus facilitating comparison and statistical aggregation of the data. By contrast, qualitative methods typically produce a wealth of detailed data about a much smaller number of people and cases. (Patton, 1980, p. 98)

The phenomenological method of qualitative research as described by Taylor and Bogdan (1984) sets the tone and perspective of this study.

The phenomenologist views human behavior, what people say and do, as a product of how people define their world. The task of the phenomenologist and, for us, the qualitative methodologist, is to capture this process of interpretation. As we have emphasized, the phenomenologist attempts to see things from other people's point of view. (pp. 8-9)

Values and Principles of Qualitative Research

In addition to attempting to understand circumstances from another person's frame of reference, qualitative research also integrates other important values and principles into its methodology. The researcher observes situations and the people involved holistically, searching for meaning in context. Contrary to reductionist thinking, the big and broad picture is viewed and analyzed in order to understand the fullness, richness, and complexity of the whole. Inductive reasoning is employed in order to allow flexibility to follow whatever course emerges while conducting the research. Patterns and trends that develop are analyzed rather than preconceived. Therefore, the qualitative researcher must cast aside his or her own notions about the subject or situation. Adhering to these concepts builds high levels of validity into qualitative studies.

Another central concept associated with this methodology is humanism. The researcher must be constantly aware that he or she is entering into the personal and private life of an individual. The researcher is permitted access to the thoughts and emotions, history and dreams, peaks and valleys of the human tale of each person studied. This relationship must be treated with care and respect (Taylor & Bogdan, 1984). Qualitative research is ideally suited for this study about the stress that individuals

experienced during a period of time just before they lost their jobs.

The Case Study Method

The purpose of the case study methodology was to collect comprehensive, systematic, and in-depth information about the closure of Fort Devens and how some employees managed stress. The case study method entails extensive expenditures in time for interviewing and costs related to typing and copying transcripts. The fair exchange in this kind of study is breadth for depth and detail.

One of the main features of the case study technique is intensive interviewing of subjects. While this is a strength because of the richness, thoroughness, and intensity in focusing on a narrow but deep area, it is also a weakness because the data is derived from few sources and is very subjective. I attempted to design the study to capitalize on my professional reputation of integrity and trustworthiness, my acquaintance with the participants, and a relaxed, casual environment, to open doors into the private lives of the people I interviewed. This was a big challenge, because it was obviously all up to me to acquire the information I needed from the people interviewed.

The task undertaken by the interviewer is to make it possible for the person being interviewed to bring the interviewer into his or her world. The quality of the information obtained during an interview is largely dependent on the interviewer. (Patton, 1980, p. 197)

At the heart of the case study are the stories of six individuals. The subjects had at least two elements in common: Each was a civilian employee at Fort Devens in mid-career (not eligible for retirement) and was a participant of Fit to Win. Subjects were selected through the following process. In 1993, of the remaining work force of 1,260 civilian employees, 84 were Fit to Win attendees. A list with the name and organization of Fit to Win students was provided to me by the Fit to Win coordinator at Fort Devens. Years of federal service were checked by a list provided by the Civilian Personnel Office to determine whether potential subjects were eligible for retirement. Those individuals that qualified for retirement between the beginning of this study and base closure were eliminated from consideration. Remaining on the list were 41 potential interviewees. The list was carefully inspected in order to choose a balance of males and females, who had diverse occupations and were assigned to different organizations at Fort Devens. Finally, three men and three women were chosen: A female manager from the budget office; a male manager from the education center; a female supervisor from the housing department; and three non-supervisory employees with jobs in recreation, personnel, and counseling.

One male from the supply area who was originally selected was replaced. He seemed tense, could not relax, and gave brief answers (yes or no) to questions. I don't know why he didn't respond; however, it was clear in the

first ten minutes of the interview that he was either unable or unwilling to participate under the terms necessary to conduct the research. Therefore, the male counselor was asked to participate when the original subject proved to be unable to fully contribute to the study. These six people were selected from 18 willing candidates. Six was deemed a reasonable number from the pool of 18 from which to collect and analyze qualitative data and glean significant findings.

An initial meeting was set up via a telephone call to briefly explain the study and find out who would be interested in participating in the study. A subsequent meeting was arranged in order to conduct an interview that took approximately two hours. The interviews were conducted in my private office after business hours. It was a comfortable, informal, and relaxed setting, with a sofa and arm chairs. Light refreshments of cookies and soft drinks were served. There were follow up sessions conducted four months later with each person to determine if their lives had changed at all since the initial interview. Each one took approximately 30 minutes and was either held in my office or over the telephone. I was interested in finding out what actions, if any, the subjects had taken in response to base closure getting closer, how they were coping with it, and generally anything else that they might like to contribute to the study.

Interviews. While the interviews were unstructured, the following points were covered with each interviewee. First, each subject was asked to give an overview of his or her career with the federal government, and how he or she came about working at Fort Devens and in his or her occupational field. Other questions were: How do you feel about base closure? Do you feel that you are under stress? What have you done to manage your stress? What did you think of the Fit to Win program? What parts of Fit to Win were most helpful? What would you change about Fit to Win?

The format for the interviews was open-ended questions designed to elicit responses regarding personal thoughts, feelings, and behaviors related to base closure and the Fit to Win program. I used a gentle, respectful, yet probing technique of asking questions. An informal and comfortable environment was created so that the subjects would relax and chat.

When most people hear the term "interviewing" they think of structured research tools such as attitude surveys, opinion polls, and questionnaires. . . . In stark contrast to structured interviewing, qualitative interviewing is flexible and dynamic. Qualitative interviewing has been referred to as nondirective, unstructured, nonstandardized, and open-ended interviewing. . . . The in-depth interview is modeled after a conversation between equals, rather than a formal question-and-answer exchange. (Taylor & Bogdan, 1984, p. 77)

Data Management and Analyses

I kept an interviewer's journal that documented my impressions, themes, follow-up questions for elaboration or clarification, reminder notes to myself, and general comments regarding the participants and the study. I used this journal later to construct narratives that described each individual in vivid detail. The journal helped me to be flexible and thorough as a researcher.

One potential problem with gathering follow up data was that individuals were finding new jobs on a daily basis and leaving Fort Devens. Therefore, every effort was made to capture all the information needed during the first interview. Luckily, none of the six subjects left Fort Devens during the course of the study. All conversations were taped and typed verbatim. All subjects read and signed the Human Subjects Disclosure Statement as required by the University of Massachusetts. See Appendix F for consent forms. The entire process of identifying, selecting and interviewing candidates took three months.

I read the transcripts numerous times in order to become extremely familiar with the contents. I highlighted passages, noted recurrent themes, searched for significant patterns, and examined similarities and differences in the subjects' narratives. In the process, it became clear that while all subjects shared some common experiences, three groups emerged in how they were coping with the stress of base closure. I originally labeled groups as stable, in

transition, and unstable. Later, I categorized the groups as trees, potted plants, and tumbleweed. Finally, as patterns surfaced more clearly, I used a metaphor that more appropriately captured the essence of what was emerging. The groups then became known as budgeters, investors and gamblers. I selected quotations that told the subjects' stories and developed narratives in order to weave cohesiveness in the research study. My analysis of the data became more refined and exacting as I developed a greater understanding of the situation and people that I studied. My creativity was expressed in the metaphors that were chosen as a reflection of the phenomenon taking place.

In qualitative research, researchers analyze and code their own data. Unlike quantitative research, qualitative research lacks a division of labor between data collectors and coders. Data analysis is a dynamic and creative process. Throughout analysis, researchers attempt to gain a deeper understanding of what they have studied and continually refine their interpretations. Researchers also draw on their first-hand experience with settings, informants, or documents to make sense out of the data. (Taylor & Bogdan, 1984, p. 130)

Limitations of Study

A limitation of this study is that when research began on this topic in 1991, the term "wellness program" was virtually unknown. Since that time, it has exploded into not only commonly understood terminology, but a multi-million dollar business. The Fit to Win program was called a "lifestyle management" program, but it is the same

thing as a wellness program. I have continued to refer to Fit to Win throughout this manuscript as a lifestyle management program for three reasons: 1) The program was presented by the employer who sponsored it as a lifestyle management program, 2) the participants perceived it as a lifestyle management program, and 3) I approached it as a researcher as a lifestyle management program. In order to preserve the integrity of this study, I have chosen to, as consistently as possible, retain the term lifestyle management program, except in the findings and conclusions sections of this study. However, in this day and age it is almost impossible to discuss "lifestyle management" without acknowledging that it refers to wellness. Consequently, this study does not contain a literature review of wellness programs or lifestyle management programs because these terms did not access an information base at that time period. The literature review covers the subjects of stress management and stress management education because there was literature available, and it was used as the foundation for this study.

Additionally, this study is not intended to be an evaluation of Fit to Win as an educational program. It is meant to discover the personal experiences of the participants, and to assess whether the Fit to Win program helped them to satisfactorily handle the stress of job loss. This study is person-centered with a focus on how a particular educational program, at a specific point in

time, affected those individuals on their journeys of personal growth.

I limit the case study investigation to civilian workers at mid-career for two reasons. First, some employees were eligible on the closure date for early civil service retirements. Anyone with 25 years of service at any age could receive an immediate annuity. Employees in this group did not necessarily have to find another job or relocate. Therefore, they were not subjected to the same kind of stress as a person losing his or her job. Second, military personnel are not studied because relocation is inherent in the military lifestyle. They accept that moving every three years is part of the military contract. While their job at Fort Devens may have ended, they were guaranteed a position at another installation. Further, all military personnel are automatically entitled to retirement pay after twenty years of service. This is not the case for civilian workers, and therefore base closure for them creates greater uncertainty of the future.

One limitation of this study is that qualitative research does not usually lend itself to generalizing to larger populations. Therefore, the findings of this study are limited to the six subjects studied and are specific to the context of the Fort Devens base closure.

The evaluation findings are most useful with regard to the particular setting from which those findings emerged, and the interpretation of findings is particular to those people who need to and expect to use the information that has been generated by evaluation research. (Patton, 1980, p. 282)

On the other hand, some professional researchers believe that the case study method should be applied to a broader population and the findings may have implications for other groups.

The writer must show how, in examining a specific setting or set of individuals, she is studying a case of a larger phenomenon. By linking the specific research questions to larger theoretical constructs or to national policy issues, the writer is showing that the particulars of the study serve to illuminate larger issues, and, therefore, are of significance. (Marshall & Rossman, 1989, p. 12)

In this case, we know that the employees at Fort Devens are a fraction of the 280,000 civilian federal workers who were displaced due to BRAC. This study may be of significance or have some implications for that population and the organizations from where they both worked and were terminated from employment. Accordingly, the federal government, especially the Department of Defense, has continued its reengineering, restructuring, and realigning efforts on a smaller scale that has still touched thousands of other employees who also lost their jobs but with considerably less fanfare. Massive downsizing and liquidations in private industry since 1989 have had similar consequences for huge numbers of workers at IBM, the computer industry as a whole, and many other sectors of our economic base that have been undergoing rapid change.

It is possible that this study could be of significance to or have implications for individuals or organizations involved in a reduction in force or other outplacement initiatives.

Significance and Implications of Study

Humanism is an especially important concept for this particular research and a strength of this study. This dissertation has the distinct essence of humanistic psychology, and it is meant to be a reflection of that discipline. The following statement succinctly captures the purpose and beliefs of humanistic psychology:

Humanistic psychologists shared a conviction that a person is a "being in the process of becoming." A person at his or her best, they said, is proactive, autonomous, choice-oriented, adaptable, and mutable, indeed, continuously becoming. Each human being, they argued, is a unique organism with the ability to direct, choose, and change the guiding motives or "project" of life's course. In the process of becoming, one must assume the ultimate responsibility for the individualization and actualization of one's own existence. (Smith, B., 1990, pp. 38-39)

This study is meant to contribute to the body of knowledge in humanistic psychological education. "What does this world need to know?" (Marshall & Rossman, 1989). This study attempts to provide some ideas on solutions about handling stress just prior to job loss for both individuals and organizations. This study concerned the behavior of a unique group of people (employees at Fort Devens), involved in a situation that affects many people (job loss), but

under particular circumstances (base closure initiatives of the U.S. government), that also affected many other Department of Defense employees (at other installations in the aggregate of 280,000 employees who lost their jobs under the same circumstances). Also, when this study began, there were no known studies completed on lifestyle management (wellness) programs nor on the massive reductions in employment due to BRAC. This study was intended to obtain useful information about lifestyle management education. This study was also intended to provide a contribution to literature on the usefulness of stress management education as a tool for effectively coping with the external stress of job loss. Theories of Detert and Schindler (1990), and Charlesworth and Nathan (1984) on stress management education, were analyzed in an attempt to gain insight into components of stress management education that may have proven helpful to Fit to Win participants in the study. This study attempted to fill a need in our foundation of knowledge in discovering whether a lifestyle management educational (wellness) program could effectively help individuals cope with stress.

Base closure has been a source of stress for civilian employees at Fort Devens. The next chapter will provide information on the nature of stress, its impacts upon people, and how to effectively cope with it through stress management education.

CHAPTER 2

STRESS AND STRESS MANAGEMENT EDUCATION

Introduction

All of us are under stress all of the time. Selye (1978) refers to the "stress of life," meaning that life itself is stressful. Although we are constantly stressed, we are rarely consciously aware of it. Thus, it is not recognized as a potential killer of vitality, good health, and even life. While stress can be lethal, it can also be managed.

When a person becomes knowledgeable about the origins, consequences and remedies for stress, then the foundation has been set for coping with it successfully. Therefore, education may be the pathway to a life where stress, if not mastered, is competently managed.

Definitions of Stress

Most of us recognize stress when observed from a safe distance, but many people do not understand the mechanics that cause stress. Furthermore, many people are adept at noticing stress in others while remaining fairly oblivious to their own stressful environment. This section provides an overview of the topic of stress, presents definitions, descriptions, indicators, and measurements that will provide the reader with a better understanding about the scope of stress.

Stress is defined in many ways:

The nonspecific response of the organism to any pressure or demand. (Selye, 1974, p. 27)

A perception of threat or expectation of future discomfort that arouses, alerts, or otherwise activates the organism. (Woolfolk & Richardson, 1978, p. 9)

The stress of life is any perception of the social environment and its dynamics believed to be a threat to psychological and social well-being. (Brown, 1984, p. 235)

Stress is the perception of individuals that their life circumstances exceed their capacity to cope. (Locke & Colligan, 1986, p.62)

Potentially, anything and everything in life can act as a stressor. According to Shaffer (1982), external stimuli such as noise, air pollution, adverse lighting, overcrowding, negative personal interactions, adverse working conditions, major life changes, availability of choice, and restrictive rules of living at home, work, or in the community can all be stressful. Internal dimensions of stress are nutrition, exercise, posture, rhythm and pacing of daily schedules, personal psychological states, sexuality, spiritual and creative fulfillment, sensory and neurological behavior, and personal interests.

Brown (1984) identifies eight sources of stress that lead to a state of "unwellness." Ordinary personal circumstances such as adjusting to family, school, and life changes head the list, along with crises such as illness, failed investments, marital conflicts and aging. Other top causes of stress are social changes that affect large segments of the population such as unemployment,

fluctuations in the economy, discrimination, epidemics, and wars. Social pressures such as standards for income, education, careers, and relationships can add to the pressure that a person feels, while weather, pollutants, allergens, radiation, gravity, bacteria, and viruses are environmental stressors. While all of the preceding are extrinsic factors, several intrinsic factors can also contribute to a diminished state of health. Lifestyles that include abuse of alcohol or drugs, excessive eating, and restricted exercise can be just as debilitating as an illness or handicap. Negative thought patterns based upon unrealistic social scripts or expectations of behavior can also cause stress and diminished well-being.

Rahe (1975) has provided a means of measuring the amount of stress associated with different life events. This tool was developed by using a questionnaire to inquire about the kind of stress that people experienced and their appraisals of the amount of adjustment that each one acquired. "Life change units" (LCU) were then assigned by the researchers who analyzed the results. The LCUs ranged from 25 for an injury or illness that did not require hospitalization to 105 points for the death of a child. A strong correlation was found between scores over 300 over a one-year period and the incidence of some illnesses. The inventory is listed in Table 1. The scale is

Table 1
The Stresses of Life

Health	LCU
An injury or illness that:	
kept you in bed a week or more or sent you to the hospital	42
was less serious than described above	25
Major dental work	40
Major change in eating habits	29
Major change in sleeping habits	31
Major change in usual type or amount of recreation	30
Work	
Change to a new type of work	38
Change in work hours and conditions	33
Change in responsibilities at work:	
more responsibilities	31
fewer responsibilities	29
promotion	31
demotion	57
transfer	38
Troubles at work:	
with your boss	39
with coworkers	35
with persons under your supervision	30
other work troubles	31
Major business adjustment	38
Retirement	49

Continued, next page,

Table 1, continued:

Loss of job:	
laid off work	57
fired from work	64
Taking a correspondence course	29
Home and Family	
Major change in living conditions	39
Change in residence:	
move within the same town or city	28
move to a different town, city or state	38
Change in family get-togethers	26
Major change in health or behavior of family member	52
Marriage	50
Pregnancy	60
Miscarriage or abortion	53
Gain of a new family member:	
birth of a child	49
adoption of a child	45
a relative moving in with you	57
Spouse beginning or ending work outside the home	37
Child leaving home:	
to attend college	28
to marry	30
for other reasons	29
Change in arguments with spouse	34
In-law problems	29
Change in marital status of your parents:	

Continued, next page,

Table 1, continued:

Divorce	38
remarriage	33
Separation from spouse:	
Due to work	49
due to marital problems	56
Marital reconciliation	42
Divorce	62
Birth of a grandchild	31
Death of spouse	105
Death of other family member:	
Child	105
brother or sister	64
parent	66
Personal and Social	
Change in personal habits	31
Beginning or ending school or college	32
Change of school or college	28
Change in political beliefs	25
Change in religious beliefs	29
Change in social activities	28
Vacation	29
New, close, personal relationship	32
Engagement to marry	39
"Girlfriend" or "boyfriend" problems	30
Sexual difficulties	49
"Falling out" of a close personal relationship	35
An accident	44

Continued, next page,

Table 1, continued:

Minor violation of the law	32
Being held in jail	57
Death of a close friend	46
Major decision regarding the immediate future	45
Major personal achievement	33
Financial	
Major change in finances:	
increased income	27
decreased income	60
investment and/or credit difficulties	43
Loss or damage of personal property	40
Moderate purchase	26
Major purchase	39
Foreclosure on a mortgage or loan	57

(Rahe, 1975, pp. 120-121)

self-evaluative, subjective, and does not consider individual predisposition to illness, or the effects of unrelenting smaller stresses. However, this scale is widely available and commonly used for personal assessment of stress levels.

The circumstances of everyday life cause stress. Life is further complicated by unpredictable situational crises that can command our attention and force us to re-prioritize our lives. Stress is caused by a wide range of stimuli. Waking to the sound of the "alarm" clock, getting ourselves and the family off to school and work,

rushing to catch the train, twisting an ankle, meeting deadlines, handling conflicts between subordinates, working late, getting caught in traffic, eating fast food, chauffeuring the kids to soccer practice, breaking a nail, spilling Pepsi on a suit, answering the phone in the middle of the night to hear of a close relative's death, all generate the symptoms of stress that make us feel "strung out" or sometimes even crazy.

Symptoms of Stress

We all react to stress. However, each person reacts to stress in a personalized way. One of the mysterious characteristics of stress is that it does not create specific, recurring symptoms that can be readily identified and labeled as a syndrome. Rather, each person customizes the symptoms. The causes of stress are unique to the individual and so are the results.

Shaffer (1982) identifies four types of common symptoms of stress: body, feeling, cognitive and motor. The lengthy list of body symptoms includes flushing, sweating, dry mouth, shallow breathing, chest oppression and pain, heart palpitation, pounding pulse, increased blood pressure, headache, backache, feeling of weakness, intestinal distress, vomiting, diarrhea, constipation, fatigue, loss of appetite, nervous chill, insomnia, breathlessness, flatulence, belching, abdominal cramping, irritable colon, dizziness, fainting, and prickly skin

sensations. Agitation, shakiness, easy tiring, panic, depression and irritability are feeling states of stress. Cognitively, stress entails worry, dread, inattention, distractibility, forgetfulness, nightmares, and fear of death. Motor symptoms indicating stress are muscle tightness, tremors, tics and spasms, increased startle reaction, incoordination, sighing, freezing and immobilization.

The symptoms of stress have been covered by many other researchers. A summary of stress symptoms is provided in Appendix G. Suffice it to say that the symptoms of stress are as varied and unique as the person experiencing them.

Physiology of Stress

The symptoms of stress are a combination of overt and covert thoughts, feelings, and physiological changes that signal a warning of potential or actual danger to an individual. Just like a smoke detector or an ambulance siren, the human body has the devices described above to alert one to an emergency and respond to the situation at hand. The symptoms of stress are caused by a very complex pattern of chemical and biological processes that are referred to as the physiology of stress.

Why does the person react so dramatically during stress? What is it that's happening physically that can cause individuals to be "scared to death"? Selye (1974, 1984) conducted decades of pioneering research into the

nature of stress at the University of Montreal. He published what is now considered a classic work on stress entitled The Stress of Life and followed it up with Stress without Distress. Selye explains the body's reaction to stress with a theory called the General Adaptation Syndrome (GAS). Stress triggers the following three stages. First is the alarm reaction, then resistance, and then exhaustion. He likens these stages to, respectively, (1) childhood, which is characterized by excessive response and low resistance, (2) adulthood, during which resistance has been increased by exposure to most common stimuli, and (3) aging, which is accompanied by irreversible damage and exhaustion. Eventually the organism succumbs to death. Selye states that complete freedom from stress is death.

The stressor, which can be internal or external, simultaneously activates cognitive and physical processes. Mentally the individual determines whether the situation is dangerous or safe. If the individual decides that there is no threat, the GAS stops. When the person perceives an emergency, the alarm reaction escalates, with corresponding physical changes activated by the glands and organs of the body. A decision is made about coping behavior, and if it is effective, the GAS stops. Resistance and exhaustion occur when coping is unsuccessful. See Figure 1.

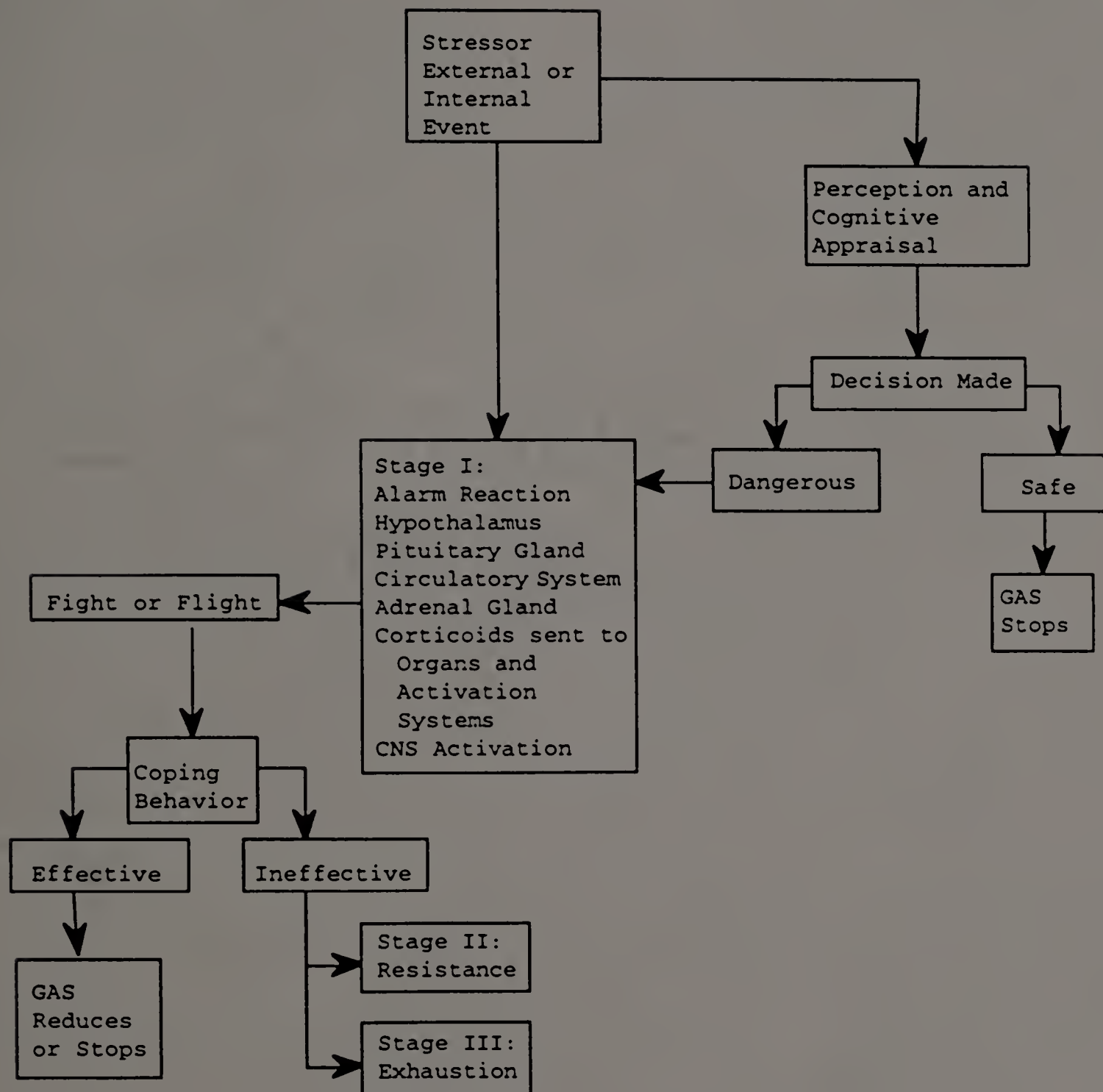


Figure 1. Sequence of events in the general adaptation syndrome (GAS). CNS, Central Nervous System. (Shaffer, 1982, p. 15)

The purpose of the GAS depicted in Figure 1 is to optimize the body's ability to neutralize the impact of stress on the individual. The stressor catalyzes simultaneous physiological reactions. One is designed to perceive and appraise the event as safe or dangerous. If it is evaluated as safe, the GAS terminates. On the other hand, if the stressor is judged as a danger, the three stages of the GAS - alarm - resistance - exhaustion - activate and attempt to handle the situation. If it is effective, the GAS ceases. However, if it is not successful, either because the coping behavior was ineffective or the stress was prolonged and unabated, the GAS continues beyond exhaustion. At that point the person begins to suffer from the effects of chronic stress.

Selye (1974) states that the body's adaptation energy or capacity for adaptation is finite. His studies with animals show that the body cannot adapt indefinitely. It may be similar to a well dug in an arid zone that is used to quench thirst, cleanse, and refresh, but after constant use goes dry. There may be some truth, after all, to the sayings, "I'm running on empty" and "I have nothing left to give." Learning about the body's responses to stress may provide insight as to how one can conserve and preserve its resources, averting premature depletion.

Fight/Flight

One kind of stress response is what Cannon (1963) calls "fight or flight." Cannon believes that the pattern of responses activated when a person is under stress is attributable to our evolutionary heritage as Homo Sapiens. Early humans had primitive responses to signals of impending danger which were interpreted as attack or retreat. Woolfolk and Richardson (1978) describe the cave man's reaction in terms of the fight or flight response which complements the GAS model.

The sound of an approaching animal would arouse the sympathetic branch of the autonomic nervous system. The part of the brain stem known as the hypothalamus would activate the pituitary gland and the adrenal glands, which then secrete various steroids into the blood. These hormones circulate through the body causing changes that are important to any organism that must attack or flee in order to survive. Blood is diverted from our internal organs to our brains and skeletal muscles, providing us with energy for quick thinking and vigorous physical activity. The pupils of our eyes dilate, making them more sensitive to gradations in light. Hearing becomes more acute. Our hands and feet perspire. Our blood pressure is elevated. Our heart rate increases. Our breathing becomes more rapid, and our oxygen consumption increases. These reactions occur automatically once a situation is perceived as threatening. Accompanying these physiological changes very often are the emotions we associate with fighting or fleeing—anger or fear, respectively. (pp. 8-9)

Cannon's (1963) work led him to declare that these reactions serve to reestablish "homeostatis" or balance in the individual. While these functions did protect our ancestors, Cannon says that they are antiquated in the modern world. This is an arguable point. Immense crime and

divorce rates, economic turmoil, and political uncertainties domestically and abroad attest to the complexity, insecurity, and express pace of our times. These are real threats that we are constantly exposed to, and we must continually adjust to them. While we still need a device for ensuring equilibrium, the constant barrage of stressful stimuli of the waning twentieth century keeps many of us in an almost permanent state of alert.

Immunological System

The unceasing GAS of stress affects the immunological system in ways that we now understand to be harmful to our own general state of well-being and health. The immune system is the body's mechanism for defending itself against illness. Its two main tasks are to identify "self and non-self" and then to neutralize anything that is an "antigen or non-self." There are two separate divisions of defense, namely, the cellular and humoral immune systems. In cellular immunity, the body attempts to protect itself from antigens that invade the body's cells. Examples are viruses, cancers, and transplanted organs. Immune cells such as the T-lymphocytes and natural killer cells are the major combatants of cellular immunity. When the foreign substance attacks the blood or lymph glands, the humoral system takes control of the operation by producing antibodies which seek to destroy the invader.

Under most circumstances these processes are victorious over enemy forces. However, stress can have an adverse impact on the immune system's ability to effectively accomplish its mission. In particular, chronic stress response can damage the body and leave it in a condition that is susceptible to illness.

Cortisol, a stress-related hormone, is a known immunosuppressant. It diminishes the virility of interferon, an anti-viral agent. A variety of conditions are associated with elevated cortisol levels. Among them are Parkinson's disease, Alzheimer's, multiple sclerosis, depression, cancer, hypertension, diabetes, ulcers, heart attack, infections, stroke, obesity, arthritis, and alcoholism (Weiner, 1986).

Stress also seems to affect predisposition to infectious diseases. Theorists believe that the fragile balance between the host and pathogen is upset by stress. Therefore, instead of successfully eliminating infectious micro-organisms through the production of antigens, the body may succumb and become ill (Weiner, 1986).

The immunological system is an ecology that operates with the sole purpose of achieving and sustaining the extremely delicate state of equilibrium for the organism. The processes are numerous and complex, and they interplay in some ways that are not completely comprehended by scientists.

Control and Stress

Another aspect of the immunological system is that it is not exclusively a physiological phenomenon which counters stress. An individual's mental state at the time of stress is known to impact homeostasis. In particular, whether a person considers himself or herself to have some amount of control over the situation or stressor is an important element in the effectiveness of the immunological system and therefore in determining illness or health.

Several important experiments have been conducted with laboratory animals concerning stress and control. Locke and Colligan (1986) report that in one test conducted by Steven Maier and Mark Laudenslager, pairs of rats were connected to shocking devices. Each rat received the electrical charge at the same time; however, one rat could learn to turn off the shock to himself and his partner by turning a small wheel. The results were that the rat with the control had a higher white blood cell count, and therefore a more active immune system than the helpless creature. The rat that lacked control also exhibited symptoms of "giving up." Locke and Colligan note that Martin Reite found similar outcomes in his study with young monkeys who were separated from their mothers to produce stress. All of these animals also demonstrated listless, whimpering, disorientation, depressed, immobilized behavior, and a reduction in white blood cells.

The scientific studies of Seligman (1991) have led him to conclude that the passive reaction to stress in both animals and humans is a conditioned response. He termed this phenomenon "learned helplessness." Seligman states that when an individual encounters stressors which he believes are uncontrollable, or repeated attempts to cope have been unsuccessful, he may surrender to despair. In a cornerstone study, he conditioned dogs to associate a bell with a shock while suspended in a Pavlovian hammock. Next they were placed into a shuttle box which was electrified, but the canine could easily jump over a low obstacle to avoid the shock. While unconditioned dogs would quickly learn the appropriate avoidance behavior, the conditioned dogs almost immediately ceased struggling and submitted to the shock. The dogs who were conditioned to be helpless failed to learn skills that could help them escape the threat. They were transformed into whining, passive, overwhelmed and defeated creatures.

Clinically induced learned helplessness or the "giving up complex" is the result of encountering stimuli that the individual interprets as being overpowering. In turn, as the individual becomes depressed emotionally, the immunological system becomes overtaxed and depleted, and becomes depressed in its functioning. Worry and fear predominate, while interest in food, sex, leisure activities is diminished. It's as though a person has withdrawn all her money out of the bank, doesn't have

anything to deposit, but the bills are due and she's trying to make payments. Studies show that the exhaustion of biochemicals in the body may be responsible for learned helplessness or depression.

While some events in life are guaranteed to precipitate stress, there is another factor that determines whether an event is considered stressful by the person experiencing it. The way that an individual perceives the event and his or her own ability to competently cope with it plays a key role in this process. When individuals are faced with a stressful event but estimate that they don't have the physical, mental, emotional, or other resources to master the moment, they may begin to believe that they can't control the outcome any longer. That idea can quickly plunge them into a state of being overwhelmed. They may then succumb to mental and emotional depression.

Effects of Stress

Research has shown a causal link between uncontrollable stress and depression. Depression is a devastating and debilitating disorder. It threatens the individual's ability to recover from setbacks and to lead a healthy, productive life. In order to successfully manage stress, we must fully understand the dynamics of depression.

Seligman (1991) compares the symptoms of depressed experimental subjects and depressed clinical patients.

Using the DSM-IV-R to classify and diagnose, he juxtaposes the nine hallmarks of depression with the behavior of animals and people in the learned helplessness tests, finding that the behavior of all groups is congruent with the theoretical model of depression.

Seligman (1991) has reached the startling conclusion that depression in our modern era is an epidemic of learned helplessness.

When we now looked at the upsurge of depression, we could view it as an epidemic of learned helplessness. We knew the cause of learned helplessness, and now we could see it as the cause of depression: *the belief that your actions will be futile*. This belief was engendered by defeat and failure as well as by uncontrollable situations. Depression could be caused by defeat, failure, and loss and the consequent belief that any actions taken will be futile. (p. 70)

From these studies it can be deduced that stress can cause depression. We already know that depression diminishes the ability of the immunological system to function, thereby causing illness. Therefore, it is not surprising to find out that other studies have suggested that depression may be a causative factor in a number of illnesses. However, it may be a shock to learn that depression is frequently associated with cancer, according to many highly respected researchers.

Schmale and Iker had noticed that cancer and other diseases appeared after individuals experienced certain high-stress situations, and that the individuals simply seemed to cave in to the stress. For their subjects they chose a group of women whose Pap tests (the standard tests for cervical cancer) revealed what were described as "suspicious" cells. The researchers hoped to predict from their psychological assessment which

of the women would turn out to have cancer before the diagnosis was made. Their prediction was that the women who would be diagnosed with cancer would report having responded to some major life upheaval with hopelessness.

Schmale and Iker predicted that eighteen women would develop cancer and that thirty-three would not. Their forecasts proved remarkably accurate: of those eighteen marked as cancer patients, eleven had the disease. Of the thirty-three others, twenty-five were cancer-free. Their findings were based solely on the degree of hopelessness a woman showed in the face of stress, not the amount of stress each woman had survived. (Locke & Colligan, 1986, p. 146)

Cancer is a disease in which the body produces abnormal cells uncontrollably. It seems that normal cells mutate into defective cells which the immune system is unable to combat effectively. It is suspected that excessive amounts of corticosteroids which are released during the stress reaction suppress the immune system, creating a condition of vulnerability in which cancer has its genesis. While cancer remains a mystery to a great degree, it can be safely stated that heredity, environment, and lifestyle may also affect cancer. The leading psychosocial factor is depression.

Shekelle, Ostfeld, and Paul (1981) conducted a study on workers at a mid-Western factory in 1957-8. They documented the major attitudes of the participants during that period in their lives. Seventeen years later they studied the current state of health of those workers with the purpose of inquiring whether there were any common variables that may predict cancer. Sixty of the 2000 surveyed had died of cancer, and the striking consistency

was that they all had high depression scores in the previous study. In the same study, there were no significant findings to correlate drinking or smoking habits with death due to cancer.

In a seminal study on cancer and personality, reported by Locke and Colligan (1986), Dr. Lydia Temoshok discovered that behavioral traits of complacent melanoma patients predispose them to greater risk of developing cancer and relapsing and/or dying from cancer. She calls this group the Type C personality, who characteristically always must feel happy and in control.

LeShan (1961) analyzed interviews of 250 cancer patients which focused on their life histories and compared them to others hospitalized for dissimilar diseases. The cancer patients shared the commonalities of loneliness, isolation, and unpropitious family relationships in early life. As they proceeded into adulthood, they became deeply attached to a person, a job, or a cause. Later their attachment was lost, and childhood memories of emptiness and hopelessness resurfaced. Several months later they were diagnosed with cancer.

Similarly, a certain type of personality apparently is heart attack prone. Researchers Friedman and Rosenman (1981) were the first to formulate the profile of the Type A personality. Type A individuals are at very high risk for coronary disease. Because they are constantly in a stress reaction state, they are highly competitive, driven by

deadlines and easily aroused to hostility (Pelletier, 1977).

In addition, Brown (1984) describes a condition between health and illness which she calls "semi-sick" and places the blame decisively on stress. She claims that this status of unwellness is the major affliction of modern society and that it is the precursor of the clearly symptomatic illnesses labeled and sanctioned by medical professionals.

Many other illnesses have been linked to stress, such as hypertension, ulcers, stroke, heart attack, diabetes, skin disorders, irritable bowel syndrome, arthritis, asthma, allergies, infertility, migraine headaches, chronic pain, anxiety attacks, eating disorders, and sexual dysfunction. Furthermore, the more generalized ills of society like alcoholism, drug abuse, and all sorts of crime may result, in part, from unsuccessful attempts to cope with the stress of life.

Our forefathers viewed illness as so mysterious and inexplicable that they frequently attributed it to supernatural forces. It was thought that the fortunate could evade illness and the unlucky were inevitably destined by fate to sickness and early death. Now we know that some illnesses evolve in a multi-phased process. First, the daily drone of stress causes the body to deplete its physical, mental, and emotional assets to a level where it is unable to regain equilibrium. The person becomes

weakened and vulnerable, and the physiological functions become impaired. Through submission to outside toxic invaders or by deterioration of organs, the body malfunctions. Illness is the result. Stress is frequently a major cause.

Mind-Body Connection

Many studies show that the mind affects health. While this is a revolutionary concept in the West, some Eastern cultures and religions have been built on this understanding. Whether it is a new or old idea, in just the past two decades a field of Western medicine has sprouted which is devoted to the study of the mind-body connection.

"Psychoneuroimmunology" analyzes the relationship between the nervous, endocrine, and immune systems. Scientists are conducting research to comprehend the interactions of the brain, spinal cord, hormones, and our ability to restore physiological equilibrium when confronted with stress. Our immune system is no longer viewed as a self-contained regulator but rather as a component of an intricate system in which mental, emotional and physical processes are inextricably bonded.

Neurotransmitters are chemical messengers that stimulate the nervous system by transmitting impulses among nerve cells. Scientists have been stunned to discover neurotransmitters everywhere in the body. Insulin, serotonin, and endorphins like all other neurotransmitters

are involved in a "psychosomatic communication network." Moyers (1993) cites Dr. Candace Pert as stating that neurotransmitters "mediate intercellular communication throughout the brain and body." She also states that neurotransmitters are the biochemical equivalent of emotions. In short, she asserts that emotions are the link between the body and the mind.

Dr. Pert says that the emotions perform the duty of a bridge with two-way traffic (communication) between the mental and the physical. She states that the brain and the body can no longer be considered as separate and distinct entities with their own independent functions to perform. The head is no longer considered to be the totalitarian ruler of the body nor is the body on automatic pilot flying an uncharted course. Rather, the system is holistic, homogenous, dynamic and synergistic. Physical, mental and emotional processes have been joined together in a lifelong partnership within each individual, ultimately determining his or her destiny. This concept makes a new paradigm in Western medicine imperative.

Coping

If the paradigm about how the body operates is indeed shifting or has already radically shifted, then our strategies for coping with stress and illness and also maintaining health must be transformed. We cannot avoid or even prevent stress. Many things are completely out of our

control: the illness of a child, the death of a parent, car accidents, earthquakes, and international politics.

However, recent studies imply that we may play a critical role in regulating our body's functions, and sometimes court illness inadvertently. Medicine steps in to attempt to treat or cure after the damage has been done.

While we don't have control over much of the stressful stimuli which bombard us, we do have the ability to control our response to stress. We may also have the ability to prevent the adverse effects of stress and heal ourselves. Selye (1984), one of the original researchers on the subject, coined the term "stress." He states that stress is usually the outcome of a struggle for self-preservation (the homeostasis) of parts within a whole. Stress responses are purposeful, homeostatic reactions. It is his belief that the biological laws that effectively control the body's cells and organs are "teleological" or produce purposeful causation for the organism's "best good." In other words the organism, or person, wants to grow.

Selye (1984) discusses four different types of healthy adaptation. He defines growth as the multiplication or enlargement of reactions already learned and developmental adaptation as a response to a demand by further activation and growth of previously developed reactions. He then defines redevelopment adaptation, which occurs when the organism is forced to readjust itself to an entirely different activity. Eustress is a positive, good, euphoric

response to stress. It describes the mental, emotional, and physical status when a person successfully adapts to change; and it all depends upon "how you take it." In other words, an individual's perception, attitude, and approach towards the stress dictates whether it is considered distress or an opportunity for successful adaptation.

Selye's (1984) thesis is supported by Dr. Suzanne Kobasa who is cited by Locke and Colligan (1986). Kobasa studied different groups of people under stress to determine factors leading to "hardiness." The histories of these persons were analyzed using variables such as income, religion, job prestige, support networks, and heredity. Her findings indicate that healthy or "hardy" individuals all possess some unique personality characteristics, while the other variables did not prove to be significant (Locke & Colligan, 1986, pp.92-94).

Shaffer (1982) offers ten characteristics of the "resilient" or stress-resistant or "hardy" individual based upon his clinical observations:

1. The resilient person has decided to live. This person is not ambivalent about living or dying. He embraces life—at home, at work or at play.
2. Out of this decision emerges a *will to live* and *specific reasons for being*. These people not only have goals toward which they strive, but also continuously update old goals and create new ones.
3. Once the person decides to live and determines why he will live, he then formulates *how* he will live. Resilient types want to live well and to thrive.

4. The resilient type has an *optimistic attitude* about life and self. This person expects life events to turn out well and in his favor.
5. The resilient type views himself as *master of his fate*. He is in control, and his power lies in his ability to handle whatever vicissitudes of life come along.
6. The resilient type operates in an *open learning mode*. The person engages in divergent thinking, the basis for creativity. Divergent thinking occurs when a person considers many different alternatives in the appraisal of a situation.
7. The open learning attitude leads to the resilient person's viewing stressful situations and changes, the good and the bad, as *opportunities and challenges*. The resilient person views a situation as an opportunity to learn, to grow, and to enrich life.
8. The resilient person handles these challenges by engaging in a *problem-solving* (or *solution-finding*) *dialogue*. The resilient person steps back, gains an overall perspective, defines the problems and task at hand, and then finds solutions.
9. The dialogue process of resiliency makes the resilient person an *active participant* in his fate. An active participant will use change to his advantage. The resilient type accepts change as inevitable and uses each situation as a unique opportunity to have some experience that enriches him.
10. The stress-resistant type, then, is characterized by a matrix of attitudes and action styles that emphasize *responsibility*. Resilient people realize that they are responsible for their fate as well as their health, thinking, feeling, and behavior. They carry out this responsibility through a realistic acceptance of the consequences of their actions. True responsibility entails accepting feedback, both positive and negative. A responsible person can accept success or failure without a loss of self-esteem. The responsible person uses feedback as an opportunity to learn and to improve.

Responsible people *like themselves*, have *high self-esteem*, and *strive to improve*. (pp. 223-225)

Personal responsibility is at the heart of the new paradigm. It is a central thesis of this dissertation that each individual must hold herself accountable to some degree for her state of health. This entails formulating attitudes and taking action that support and promote wellness. Many of life's events are uncontrollable, but how one reacts to them is largely up to the individual. As depicted in Figure 2, events can be approached with perceptions, expectations, and appraisals that help well-being and health or intensify stress, mental and emotional distress, social disorganization, physiological damage, and illness.

Effective coping entails responding to stress in ways that induce well-being. First, situations must be evaluated as challenges or opportunities rather than as threats or disasters. Personality characteristics such as a positive attitude and resilience aid the person's journey toward health. Creative problem solving and recalling effective past coping plus a hopeful vision of the future also promote successful coping. Progress can be enhanced by personal habits such as good nutrition, exercise, relaxation, or can be undermined by smoking and substance usage. Adequate and appropriate changing with the times and circumstances is the yellow brick road of coping with change. Believing that changes will enrich one's life is

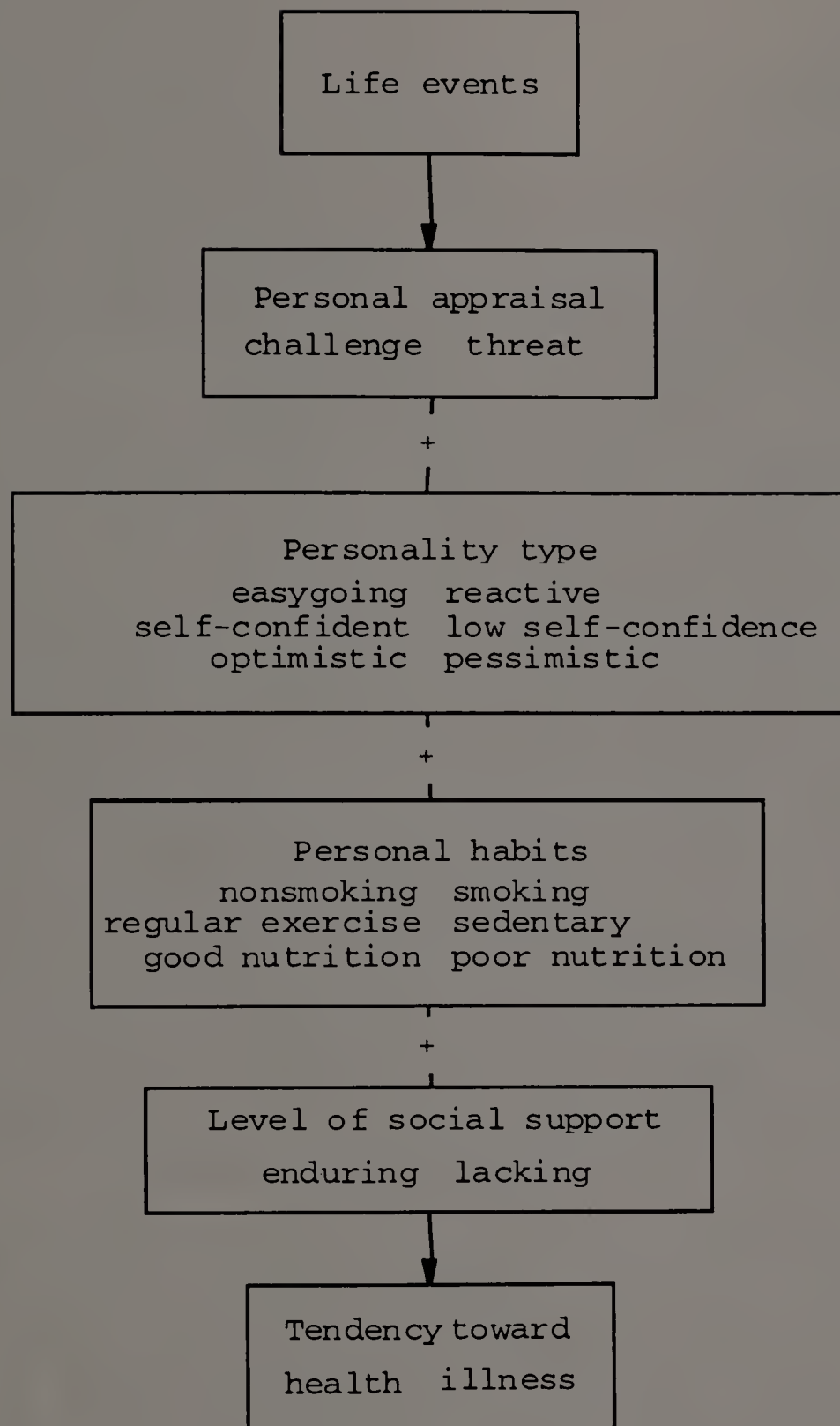


Figure 2. Stress Chain (Myers, 1992, p. 525)

the wizardry. We commonly refer to these two processes as adaptation and optimism, and they are two of the most

important and effective mechanisms that can transport us to a place of well-being and health.

Locke and Colligan (1986) cite Kobasa as using the knowledge she obtained by researching "hardiness" to educate individuals to countermand stress with adaptability. She uses focusing techniques to isolate when and where stress strikes and how it affects one's emotions and body. Insight and awareness of the origins and manifestations of stress are gleaned by acknowledging the source of stress and devising methods for dealing with it. Adaptation in this context does not imply surrendering to situations that are uncontrollable. Rather, it means that difficult situations offer opportunities to engage in a creative process where the person cooperates with the circumstances to learn and change. One of the most amazing characteristics of the human spirit is its ability to utilize adversity for growth.

Seligman (1991), who discovered the phenomenon of learned helplessness, is now applying that data to teach depressed people how to cope with stress. He presents the concept that people can be "immunized" against learned helplessness by learning to think differently about problems and to believe that they can make a difference in outcomes. He says learned optimism is an antidote for depression.

According to Seligman (1991), your explanatory style or your habitual way of interpreting events in life is

based upon thoughts and attitudes acquired in the developmental years. It reflects the person's world view and one's place in it. There are three ingredients of a person's explanatory style that are clues to whether a person is a pessimist or an optimist. Pessimists think that crises are permanent, pervasive, and personalized.

Optimists see problems as temporary setbacks rather than final failure. Optimists give specific causes for adversity and may be slowed down by it for a while but do not give it global meaning. Optimists also personalize good outcomes by attributing them to their intrinsic effort or luck while blaming unfortunate occurrences on external forces.

Cognitive therapy is a method that Seligman recommends for changing the way a person thinks about the stresses of life that can cause failure, loss, and despair.

By exploring their personal histories, people can gain understanding about their own role in the creation of the conditions that allow stress to dominate and to cause illness. Siegel's work (1986) strongly suggests that people change their lives by choosing to love themselves and others. First, a person must accept himself and take care of his own needs. This demonstrates self-love, which is the very essence of self-esteem. In this way, high self-esteem has a direct and positive impact on one's state of health.

When a person has self-love, he or she feels more comfortable giving and receiving love from others. Social support is vital for handling the unavoidable turmoil

encountered in everyday living. Beyond that, social support may be a key element in living a longer life. Studies indicate higher mortality rates for single and lonely people. In a landmark study, Spiegel (1989) randomly divided female cancer patients into two groups of 43 patients each. Everyone received standard medical care, but one group also participated in weekly group therapy. The latter group reported significantly less pain, anxiety, and depression, as well as an improved quality of life. The women who were involved in support groups also lived twice as long as the group that received only standard medical treatments. Obviously, treating the body and mind was both innovative and effective.

Coping effectively with any kind of stress depends upon either controlling as many aspects of the problem as possible or "letting go" and adjusting to those things that we can't control. Frankl (1984), survivor of a Nazi concentration camp, has taught the world that even under the most horrifying conditions when one has no control over circumstances, one always has control over his or her attitude. The attitudes of adaptability, optimism and self-love promote healing. Furthermore, establishing social connections to express negative emotions and gaining empathy have proven to be unexpected but valuable and productive methods for managing stress.

Stress Management

We can't always avoid the events that may cause stress. Even so, many of life's crises are predictable and controllable to some degree; therefore, it is possible to mitigate some of the effects of stress. In addition to choosing our attitude towards adverse circumstances, there are other means of confronting stress with practical skills. Stress can be turned into a learning experience through stress management.

Stress management may be an alternative to premature disease, disability and death. Stress management is not a panacea for stress, but it is a new way of perceiving and responding to the stress that envelops every person, every day, everywhere. Stress management entails lifestyle changes and a philosophy based upon self-discipline. In the enormously popular book The Road Less Traveled, Peck (1980) contends that any problem can be solved with self-discipline, and none can be solved without it. Peck provides four tenets of self-discipline: responsibility, delayed gratification, dedication to truth, and balance. Clearly, self-discipline is a starting point for stress management.

While self-discipline is essential to stress management, it can only be effective in the long term if the individual holds a deep-rooted understanding as to "why" it is in the person's best interest to behave in a preferred manner. Education builds the foundation of ideas

that cause a person to act with deliberation and purpose. We gain some amount of control when we acquire knowledge about something and consciously apply that knowledge to our advantage. We can learn not only to live with stress, but also experience personal insight and growth through education and the application of some basic stress management principles.

Stress Management Education

With increased awareness of the delicate mind-body connection, it's time that we re-educate ourselves about the nature of stress and our role in countermanding it. Education can be a very powerful tool in stress management. It can set a solid structure for mental and emotional levees and silos of skills for the body which will be like reserves of water and grain during times of drought.

Charlesworth and Nathan (1984) have devised a model for stress management education which breaks down the cycles of distress and wellness into their basic components. Distress and wellness start with identical stimuli like decisions, pain, environment, family, and work. At this point a person's actions determine whether he or she will become overloaded or apply health-promoting lifestyle responses. A reaction to stress overload may lead to immediate effects such as overeating and excessive alcohol consumption. Immediate effects may develop into long term disorders such as obesity and alcoholism. The

overall costs of these reactions are decreased productivity, enjoyment, and intimacy. Figure 3 provides a detailed depiction of the Distress Cycle.

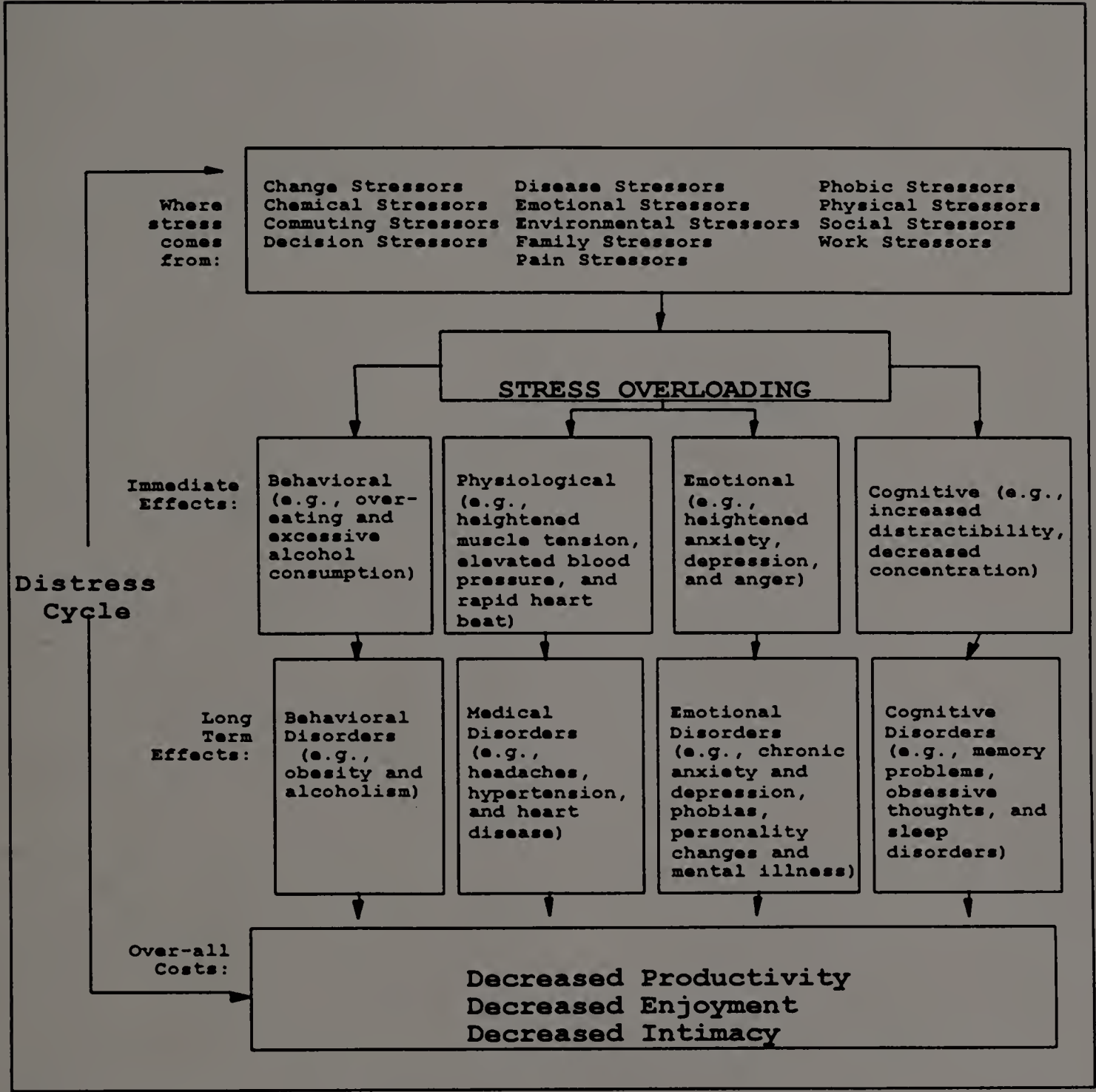


Figure 3. Distress Cycle (Charlesworth & Nathan, 1984, p. 26)

The positive reaction to stress is the Wellness Cycle (see Figure 4) which depicts adaptive lifestyle techniques and health promoting skills such as nutrition, exercise and relaxation. Long term effects of adaptive responses are improved health, resistance to disease, increased self-esteem, increased self-confidence, and resistance to future stressors. The overall benefits of wellness are increased productivity, enjoyment, and intimacy.

While this model may appear to be oversimplified, it does provide a good visual and narrative blueprint which demonstrates that stress management depends upon quality personal choices with health consequences.

A very comprehensive research project conducted by Detert and Schindler (1990) on stress management education used professional educators to collect input on content elements for a stress management course for high school students. Five learning objectives were isolated. The first objective is "ways we come to identify and understand ourselves in the context of social interaction." Other objectives are "cognitive factors that explain or influence the stress response," "personal responsibility for self-control and self-care," "insight to personal stress responses and modifiers," and "awareness of when to take control of life's events and when to yield to one's desire to control them." Additionally, a detailed list and description of the components of an effective curriculum on stress management resulted. Excellent definitions of each

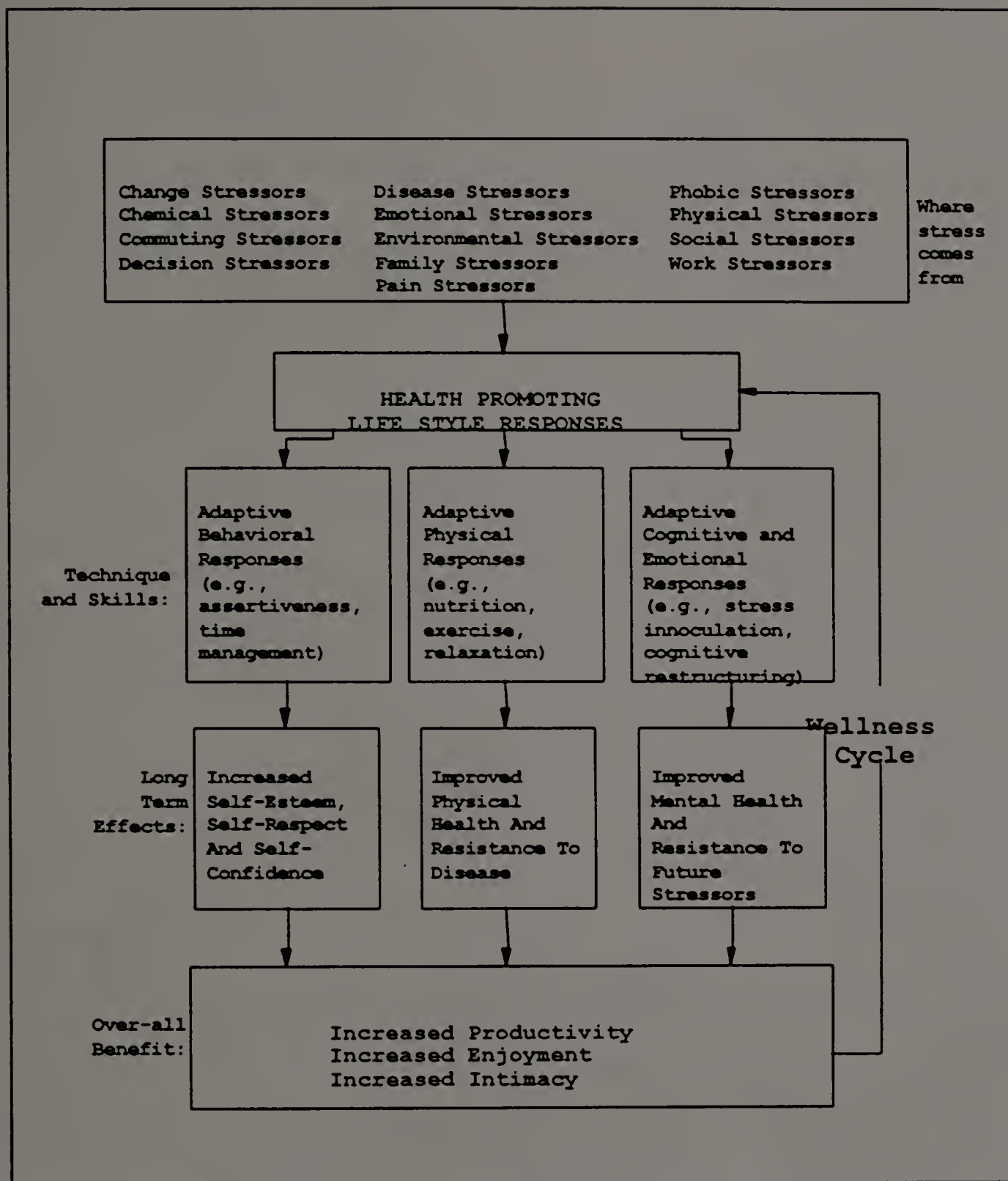


Figure 4. Wellness Cycle (Charlesworth & Nathan, 1984, p. 27)

of the twenty-seven content elements for a compendious course in stress management are presented in Table 2. The Detert and Schindler (1990) curriculum outlined above provides an outstanding model for stress management for people of any age or background. This master plan for a holistic program toward preventing and coping with the stress of life actually exceeds its original intent in a worthwhile and utilitarian way. It could be more appropriately labeled a "life-management strategic plan." Anyone who adopts these principles and techniques should be able to successfully handle the preponderance of stress and live a rich, full, healthy and happy life. Effective stress management may be a way to overcome obstacles to realizing one's potential, therefore setting the stage for self-actualization. On a more practical level, stress management education can deliver assistance to individuals during times of adversity, showing them how to deal successfully with present traumas and advance toward a period that has prospects of stability.

Fit to Win Compared to Stress Management Education

Fit to Win was designed as a lifestyle management program for military and civilian employees of the Department of the Army. The primary goals of the program are to increase awareness about healthy lifestyles, provide individual health assessment, and identify warranted

Table 2

Stress Management Components

<p>SELF-ESTEEM: Students should know that self-esteem is a personal estimation of worthiness and that "it is the capacity to experience maximal self-love and joy whether or not you are successful at any point in your life."</p>
<p>COMMUNICATION: Students should know how to read, write, speak and listen; to give and receive positive and/or constructive feedback; to interpret and utilize pertinent information; to keep channels of inter-personal communication open; and to appreciate the importance of this communication process.</p>
<p>STRESS PHYSIOLOGY: Students should know information which describes the phenomena of stress, the psychophysiological pathways of stress, how stress manifests itself, the benefits of eustress, basic indicators of too much stress, stress-related illnesses, common causes of stress, and the necessity of managing stress.</p>
<p>SOCIAL SUPPORT: Students should know how to interact and identify with others; to offer and receive loyalty, forgiveness, and positive reinforcement in an unselfish manner; to feel acceptance from significant others, as well as sharing joys, sorrows and worries with them; and to experience true comradeship.</p>
<p>DECISION-MAKING: Students should know that decision making is a process that encourages sorting out and testing of opinions, values, feelings, and information; and know and be able to systematically apply the decision making steps.</p>
<p>PHYSICAL FITNESS AND EXERCISE: Students should know that physical fitness involves muscular strength and endurance, flexibility, agility, balance, coordination, and cardiopulmonary endurance; how to achieve improvement in each of these areas through regular exercise according to their individual physical capabilities, age, or personal goals; and the physical, intellectual, emotion, social, or spiritual benefits of exercise as a stress reducer.</p>

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Table 2, continued:

<p>PURPOSE: Students should develop a sense of purpose consisting of setting purposeful long- and short-term goals and the means of achieving them; being satisfied with personal goals and willing to change them; exploring why one is here; enjoying living under present circumstances; possessing the knowledge that one's life has meaning and importance to oneself and others; and directing one's life through human pleasures, joys, sorrows, and satisfaction.</p>
<p>RELAXATION: Students should know that relaxation is a hypometabolic state consisting of reduced mental and physical energy; how it feels to experience this pleasurable and peaceful state; and how to use and practice several basic relaxation training techniques to temporarily achieve the lowest possible level of mental and physical energy.</p>
<p>STRESSORS: Students should know and be able to assess the various factors encountered in life that may create stress, including environments, negative life events, daily hassles, guilt, low self-esteem, fear, mistrust, dating, parents, peer pressure, and media messages; learn to anticipate and prepare for sources of stress; and know that there are degrees of individual resistance to stressors.</p>
<p>BALANCE: Students should know how to establish balance between meaningful work, play, and other aspects of living; to be able to cope with expectations, peer pressure, success, and failure; and to know that one may sway a bit at time, but is able to right oneself to prevent disaster.</p>
<p>SELF-IMPROVEMENT: Students should know techniques and strategies for becoming more responsible for their own health behavior; be able to make positive choices to affect changes in their health behavior; and be able to apply these strategies to change health behaviors with which they are dissatisfied.</p>
<p>SELF-REALIZATION: Students should develop the ability to realize that they are vital human beings even though significant others have not said or implied this; and that they are principally responsible for their mental and emotional well-being.</p>

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Table 2, continued:

<p>HUMOR AND LAUGHTER: Students should develop the ability to find humor in order to keep life in proper perspective, especially in the midst of adversities; to laugh at oneself as well as with others; to maintain a positive mental attitude toward daily activities; and to visualize the incongruities of life and occasionally to believe that a situation that seems hopeless may actually be humorous.</p>
<p>TIME MANAGEMENT: Students should know the process of setting priorities, scheduling tasks, and using available time into an order consistent with maximizing the probability of achieving one's personal goals.</p>
<p>SELF-AWARENESS: Students should become aware of their inner physical, emotional, and intellectual limits and signals their bodies and minds are giving; know personal patterns of response to stress; and know their abilities and potentials for coping with stress.</p>
<p>NUTRITION: Students should know that certain foods stimulate or depress the sympathetic nervous system; that dietary imbalances from eating disorders can be stress-related; that hormonal changes from chronic stress result in vitamin depletion; and that a proper balance of nutrients fortify the body to help combat stress.</p>
<p>ASSERTIVENESS: Students should know and be able to express their own preferences and decisions without embarrassment, obligation, excessive reliance on the judgments of others, or violating the rights of others; and be able to state their intentions without feeling unnecessary guilt.</p>
<p>SEX ROLES: Students should know about stress and sexual identity, including changing sex roles, two career families, and single parent families; seek a balance of attitude between the exaggerated importance in the present day sexual revolution with more conservative attitudes and be able to clarify their sexual values toward both sexes.</p>
<p>CLEARING: Students should be able to reduce stress temporarily by participating in an activity which diverts attention from stressors and maintains balance; e.g., a gentle walk, pleasure reading, or a personal hobby.</p>

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Table 2, continued:

<p>TYPE A BEHAVIOR: Students should know characteristics of Type A behavior patterns, including low self-esteem, insecurity of status, sense of time urgency, free floating hostility, and tendency toward self-destruction; know the characteristics of Type B behavior; know the psychomotor manifestations of Type A behavior; know the relationship between these patterns and coronary heart disease; and know ways to modify the destructive nature of these characteristics.</p>
<p>PLAY: Students should be able to participate comfortably in activities that are enjoyable, noncompetitive, freeing, amusing, not programmed, or merely diverting; and to know the outcomes of play are to revitalize people, to cope with life's expectations, and to inspire them with life and energy.</p>
<p>PERCEPTION MODIFICATION: Students should develop the ability to see the positive, rewarding aspects of any event or circumstance as well as the negative aspects; and to know that the messages they give themselves and the meaning they attach to events and situations can be changed by modifying self-talk.</p>
<p>SYSTEM-CHALLENGING RESPONSE: Students should know ways to assert, assess, and advocate for organizational changes of the school structure or environment and family or peer systems that may reduce personal undesirable sources of stress.</p>
<p>HUMAN/SPIRITUAL INTERACTION: Students should know the value of and ways of interacting alone or with others in spiritual ways as a resource for stress management; know that the spirit is that dimension of the human self that has more concern for something greater than oneself, such as nature, community, mankind, principles, or God; and be able to acknowledge and profit from spiritual experiences that are described in a wide variety of ways.</p>
<p>LOCUS OF CONTROL: Students should know that one of the determinants of reward or reinforcement is the degree to which they accurately perceive that the reward is contingent upon their behavior or attributes versus the degree to which they perceive the reward is controlled by forces independent of their actions.</p>

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Table 2, continued:

<p>BIOFEEDBACK: Students should know that biofeedback is learned self-control of physiological activities; that it is the use of instrumentation to provide immediate and accurate return of information to a person about their physiological processes; that this often includes information about muscle tension, skin surface temperature, brain wave activity, skin conductance, blood rate, and heart rate; and that immediate and correct interpretation enables the individual potentially to exert some control over these physiological processes and to become an active participant in the process of health maintenance.</p>
<p>MASSAGE: Students should know the value of massage, including kneading, pummeling, and stroking of various muscle groups to evoke mental and physical feelings related to stress reduction.</p>

(Detert & Schindler, 1990, pp. 5-7)

interventions that will lead to healthy lifestyles. Education, composed of classroom instruction and experiential learning in physical conditioning and nutrition are the core components of Fit to Win. In contrast to the exceptionally comprehensive elements of the Detert and Schindler (1990) model, the Fit to Win model appears attenuated. Detert and Schindler recommend 27 topics to be covered in stress management education. Two of those components, exercise and nutrition, are the fundamentals of Fit to Win. The Detert and Schindler model represents the full spectrum of subjects related to stress management. Fit to Win focuses on two areas, exercise and nutrition, as essential for lifestyle management. Topics not covered by Fit to Win are self-esteem, communication, stress physiology, social support, decision making, sense

of purpose, relaxation, stressors, balance, self-improvement, self-realization, humor, time management, self-awareness, assertiveness, sex roles, clearing, type A behavior, play, perception modification, system-challenging response, human/spiritual interaction, locus of control, biofeedback, and massage.

Exercise and nutrition are also noted as adaptive physical responses by Charlesworth and Nathan (1984) in their theory of the Wellness Cycle as described earlier in chapter 2. These adaptive responses are referred to as health-promoting lifestyle responses and manifest themselves in behavioral, emotional/ cognitive, or physical form. The long term effects of adaptive responses are improved health, resistance to disease, increased self-esteem, increased self-respect, increased self-confidence, and resistance to future stressors. The overall benefits of health promoting lifestyle responses are increased productivity, intimacy, and satisfaction. Wellness is the condition that results from practicing positive and life affirming thoughts, feelings, and actions.

Fit to Win Compared to Worksite Health Promotion Programs

A comprehensive review of the effects of worksite health promotion programs was conducted by researchers associated with the Centers of Disease Control and Prevention (Wilson, Holman, & Hammock, 1996). The purpose

of the study, which reviewed 316 studies, was to critically examine the effectiveness of specific components of occupational wellness programs. Table 3 depicts the eight interventions evaluated, the study method and designs, methodological problems, documented effects, and overall rating for the intervention technique. The interventions studied were exercise, health risk appraisal, nutrition/cholesterol, weight control, hypertension, alcohol, HIV/AIDS, stress management, multi-component programs, seatbelts, and smoking. Table 4 shows the rating system used to evaluate the programs. Of particular note related to this study are the results for exercise, health risk appraisal, nutrition/cholesterol, and stress management. Ratings are as follows: exercise - suggestive, health risk appraisal - weak, nutrition/cholesterol - suggestive/indicative, and stress management - indicative. The only factor from this study that proved to be "conclusive" was hypertension, which, although it was part of the health risk assessment, was not a separate or emphasized intervention in Fit to Win. The focus was directed at exercise and nutrition exclusively, except when the health risk appraisal recommended other specific targeted interventions which participants were referred to, but their involvement was not monitored as part of Fit to Win.

Table 3

Summary of Interventions, Methodology, Effects, and Rating for Each of the
Areas Reviewed

Area	Interventions Evaluated	Study Methods/Design	Methodological Problems	Documented Effects	Overall Rating
Exercise ⁵	Self-regulated program, fitness class (usually 30-45 minutes, 2-3 times/week), programs include compliance strategies	10% used experimental designs, 27% used quasi-experimental with matched controls, pre/post measures, primarily short-term measures (end of program to 12 months), primarily self-report, some biomedical measures	Hawthorne effect?, self-selection bias, attrition, small sample sizes	Decrease in body mass, skinfolds, % body fat, blood pressure, total cholesterol, smoking level, and absenteeism; increase muscle strength and endurance, and life satisfaction and well-being	Suggestive
Health risk appraisal ⁶	HRA followed by educational program or materials	44% used experimental designs, primarily pre/post measures, measured short-term effects (end of program to one year), used both self-report and biomedical measures	Self-selection bias, self-report measures, attrition	Decrease total cholesterol, blood pressure, smoking levels, weight, and health age; increase physical activity and seatbelt use	Weak

Continued, next page.

Table 3, continued:

Nutrition/ Cholesterol ⁷	Nutrition: group education, group education and individual counseling, cafeteria-based, group education and cafeteria-based. Cholesterol: individual counseling, group education, media, combination of all three	42% used experimental designs, primarily pre/post measures; measured short-term effects (end of program to one year) and long-term (up to six years for cholesterol) effects. Nutrition: primarily self-report, direct observation, biomedical measures for cholesterol. Cholesterol: biomedical measures.	Self-selection bias and attrition for both, lack of valid measures for nutrition	Nutrition: attitude and dietary change, decrease cholesterol level. Cholesterol: decrease cholesterol level and weight, dietary change	Suggestive/indicative for both
Weight control ⁸	Programs centered on behavior modification, education topics, and incentive system	18% used experimental designs, primarily pre/post measures; short-term (end of program to one year), self-report and biomedical measures.	Self-selection bias, attrition	Weight loss, decrease attrition	Indicative
Hypertension	Two main program formats: 1) screening, long-term monitoring and 2) group education and training.	35% used experimental designs, pre/post design with longitudinal tracking, measured both short-term (end of program) and long-term effects, biomedical measures	Self-selection, attrition	Decrease blood pressure (systolic and diastolic), increase in knowledge	Conclusive
Alcohol ¹	Two main program formats: 1) assessment, referral, follow up and 2) general education	7% used experimental designs, primarily measured short-term effects usually pre/post intervention or referral, self-report measures	Reliance on self-report, self-selection bias, attrition, sampling problems	Decrease in alcohol/drug consumption, increase in job performance, attitude change	Suggestive

Continued, next page.

Table 3, continued:

HIV/AIDS ²	Group education	9% used experimental design, primarily pre/post measures, measured short-term effects (end of program to 6 weeks), self-report measures	Self-selection bias, lack of valid and reliable measures, self-report measures	Increase in knowledge, and behavioral intent; attitude change	Weak
Stress management ³	Six broad categories: progressive relaxation, meditation, biofeedback, cognitive-behavioral skills, combination of techniques, and other. 73% were prevention programs	53% used experimental designs, pre/post measures, primarily short-term measures (end of program to one year), psychological measure or self-report	Self-selection bias, small sample sizes	Decrease blood pressure and anxiety, increase job satisfaction	Indicative
Multicomponent programs*					
Seatbelts*					
Smoking*					

*These will be reviewed in a subsequent issue. (Wilson, Holman, & Hammock, 1996, p. 108)

A criticism of the worksite health promotion programs rated "suggestive" or "indicative" was that randomized control groups were not used. This certainly is the case for this study, and the Fit to Win program. There was no research conducted to compare the exercise, nutrition, stress management, or general adjustment to base closure of

Table 4

Rating System for Individual Articles
and the Overall Literature

Rating for Individual Articles	
*****	Properly conducted study with randomized control group
****	Properly conducted study with comparison group, but not randomized control
***	Evaluation without comparison or control group
**	No intervention, but might include long-term or dramatic results from dissemination of information or a medical agent into a population.
*	Descriptive, anecdotal, or authoritative
Ratings for Literature as a Whole	
Conclusive	Cause-effect relationship between the intervention and outcome by substantial number of well-designed studies with randomized control groups. Nearly universal agreement by experts in the field regarding impact.
Acceptable	Cause-effect relationship supported by well-designed studies with randomized control groups. Agreement by majority of experts in the field regarding impact.
Indicative	Relationship supported by substantial number of well-designed studies, but few or no studies with randomized control groups. Majority of experts in the field believe that relationship is causal based on existing body of evidence but view as tentative due to lack of randomized studies and potential alternative explanations.
Suggestive	Multiple studies consistent with relationship, but no well-designed studies with randomized control groups. Majority of experts in the field believe causal impact is consistent with knowledge in related areas but see support as limited and acknowledge plausible alternative explanations.
Weak	Research evidence supporting relationship is fragmentary, nonexperimental, and/or poorly operationalized. Majority of experts in the field believe causal impact is plausible but none more so than alternative explanations.

(Wilson, Holman, & Hammock, 1996, p. 432)

employees who did not participate in the Fit to Win program.

Fit to Win did not cover general stress management techniques such as progressive relaxation, meditation, biofeedback, cognitive-behavioral skills which are stress prevention techniques. The Wilson et al. study (1996) evaluated worksite health promotion programs utilizing these techniques as indicative of effectiveness in obtaining the desired outcome of wellness.

This study also describes the evolution of worksite health promotion programs. It states that first generation programs were offered for a variety of reasons, some of which were not health related. Next, intervention programs were designed for a single risk factor or towards one population. Third generation programs were aimed at a number of risk factors or behaviors for all employees. Now, the latest stage of programs incorporates all activities, policies, and decisions regarding the health of employees, their families, their communities, and customers. While this fourth generation of programs is both holistic and comprehensive, a very small number of business organizations have progressed to this point. The Fit to Win program could be categorized as a third generation program because it covered a number of risk factors (exercise, health risk appraisal, nutrition/cholesterol) and was available to employees at Fort Devens.

Summary of Literature

This chapter has defined stress, described its symptoms, and explained its physiology. The General Adaptation Syndrome has been explained, as well as its impact on the immunological system. The element of control in relation to stress has been identified as a critical factor in whether stress can be handled effectively. The negative effects of stress such as depression, cancer, heart attacks and other illnesses have been discussed. We have become aware of the mind-body connection and how it sets the stage for coping or maladaptation. Stress management education has been shown to be a method that can be utilized to help people successfully cope with stress.

Additionally, Fit to Win has been compared to two successful stress management programs. Both the Detert and Schindler (1990) model and the Charlesworth and Nathan (1984) theory include nutrition and exercise as key components of each program and are supplemented by a variety of other techniques. The Fit to Win program is composed exclusively of a health risk appraisal, nutrition, and exercise. Fit to Win has also been compared to worksite health promotion programs. A critical evaluation of eight interventions indicates that the exercise and nutrition components of Fit to Win are suggestive and

indicative of a cause and effect relationship between the intervention and outcome per the agreement of experts in the field who evaluated the techniques used in worksite health promotion programs.

The purpose of this dissertation is to investigate the stress that some civilian employees experienced due to impending job loss because of base closure, and actions taken to cope with those stressors— specifically, whether Fit to Win has served to help these people to manage their stress.

The next chapter introduces six individuals who were interviewed in 1993, at which time each one was about to lose his or her job because of base closure. Each one has also attended the lifestyle management course called Fit to Win. We will now examine how they coped with stress.

CHAPTER 3

SIX FORT DEVENS EMPLOYEES

Introduction

In this chapter the six individuals who were interviewed are introduced separately. Bob, Carol, Alma, Mindy, Tom, and Jim tell their stories in their own words. The chapter is organized in the following way: A short overview of each subject's career is followed by the subject's discussion about base closure and the Fit to Win program. The chapter provides insights into what it is like for an individual to learn that he or she will lose a job, what kind of repercussions that knowledge has on individuals, and what kinds of measures they have employed to cope with these stressful times.

Bob

Bob is a 44-year-old man who has worked at Fort Devens since 1972. His mallard duck tie stands out against his uniform of blue oxford shirt, navy blue V-neck LaCosta sweater, and gray pants. This is an outfit that I have seen him wear many times. It is somewhat threadbare. He has a neatly trimmed beard which sets off a fairly nondescript face. He looks like a writer or philosopher or professor to me. He is now a GS13 Supervisory Educational Services Officer with 20 years of federal service. He originally started as a summer hire during college as a vocational instructor, and after college he worked as a contractor at

Fort Devens for a period of time. An entry level position in civil service became available in educational services, and he has risen up the career ladder in that field to the top position.

Bob describes a typical day before learning that Fort Devens would be closed. He had varied duties and was very busy because of the build up in anticipation of hosting Information Systems Command.

Being a manager, it's hard to have a typical day. But generally there seemed to be a fair amount of long-range planning, for new programs, new contracts, new equipment, space, and a variety of things necessary to expand and to have more to offer people in education programs. There are personnel situations, doing people's performance appraisals, and talking to employees and trying to settle disputes among employees. Dealing with contract issues or budget issues or just general office management kind of things.

We thought we were going to expand the education center with Information Systems Command. It was going to be a lot of technical people, with a lot of need to keep up to date on a lot of things. Instead of teaching soldiers how to read, we would be doing something on a much higher level. Advanced computer networking, various things. But that didn't happen.

Once it was announced that the base would close, it took some time for changes to begin happening. Things continued to be normal for about 18 months; however, then Bob did experience some anxiety.

Not knowing what my situation is going to be in a couple of years is stressful. I was kind of oscillating between being very concerned about it and panicked, to not thinking about it at all and ignoring it. I don't seem to be as concerned as a lot of people I know are. Some people seem on the verge of hurting themselves or something. I guess they don't see any hope, and they've kind of locked themselves in, that they were going to stay here, and that was their plan, and they're

still angry that their plan isn't going to work. I generally haven't been too stressed out by it, except for occasionally when I think about it, I just go, "Mm, what will happen?"

Recently, Bob's wife, who is also 44, attempted to reenter the work force as a teacher, but was unsuccessful. He believes that age discrimination has played a role in her failure to regain professional employment, and he is concerned that he might find similar difficulty when he starts to seek employment outside of Fort Devens.

I don't look at myself as that old. But I started thinking about that as a possible obstacle for me getting a job when Fort Devens closes. That brought things more to a head that I might be the sole income earner in this situation

Another thing that is stressful for Bob is that his life is rooted in New England. His extended family is located here, and they are very comfortable in their community. Furthermore, one of his children had an intensely emotional reaction to the thought of moving away. Bob wants to accommodate his family in any way that he possibly can.

When they first announced the closure of the post, I was called for a job interview down in Washington. I sat down with my family, and my young boy started crying. Just the concept of moving was not acceptable to him. My son loves the neighborhood, he loves the neighbors, he loves the school, he loves everything. The thought of going somewhere else just didn't appeal to him. You talk about the advantages of some place like Florid. We'd be right next to Disneyland, but he doesn't want to consider it. He says he'll live with the neighbors. He's a strong kid. So at that time we just scrapped that idea and I just planned to look around here.

Bob is also feeling the stress of a heavier workload during downsizing. He feels that this is taking away precious time that should be dedicated to finding himself another job in the same geographical area. He knows that he should be taking care of himself but still has many responsibilities at work. Unfortunately, the work he is now doing at Fort Devens seems largely unnecessary, in addition to being time consuming.

Over the past two years I've been busier than usual on some projects that have taken an unusual amount of work and it's taking me away from making calls, revising my resume, that kind of thing. And I tend to resent it, and it feels strange because that's what I'm paid for; but at the same time, it's like being on the Titanic and someone says, "Well it's time to do a tune-up on the boiler or something" and you say, "Come on now, the place is going down."

So far Bob really has not had time to job hunt and so it feeds his fear of not being able to find a job at all. He also is not clear about what kind of work he would like to pursue after closure. There is a slight chance that a position may be available for him at the Army Reserve enclave after closure of the installation. He wonders whether he should bother job hunting if there is a possibility that he can stay. This seems to cause further indecision and inaction. He ruminates about his future.

Well, the thought that there might not be a job out there is stressful. And not being that sure of exactly what I'd like to do. On the one hand, it's an opportunity to do something different, but on the other hand, there's a lot of people looking for work out there. When I go down to my local supermarket, and I see a guy standing in the rain with a cardboard sign saying, "Two kids. Will work for food." I turned to my son and said,

"I hope that isn't me in two years." He just laughed. But it's a concern. It's reality, and it's going to be interesting.

Bob worries about procrastination. His boss also seems aware of it because he initiated a discussion recently with Bob and encouraged him to get out there and find a job. He was told that it is unlikely that there would be a job for him in the Army Reserve enclave after Fort Devens closes.

I think I've been generally kind of ignoring it and I think I need to get more realistic. I can tend to just ignore things sometimes and suffer the consequences.

Then Bob has the concern that even if he finds a job, it might not be as financially lucrative as the one he has now. While he loves living in his community, he worries about keeping up with his neighbors.

Starting off in a totally new system would be a lot less financially. The town that I'm living in is a pretty affluent town, and it's a problem in that it's difficult now to keep up with the level of spending that everyone else is doing in the town. My daughter's soccer coach spent \$45,000 for his dining room table. There's just a lot of wealth in the town. And people who we deal with are looking at newer, bigger houses, when I'm looking at, will I be able to hang on to the one I got?

He has also explored the possibility of starting a business or joining a family owned business. He bought a computer and took a programming course as a foundation for starting a home-based business. He was not very good at it and found it extremely frustrating, so he did not follow through on that idea. Then he considered managing his mother's Irish import shop. After he went over the books, he realized that the revenues were not large enough to

support his family in addition to providing income for his mother. So far his ideas have not lead to anything feasible.

A few options that at one time I thought were out there are not, so I have to be more realistic and just keep on plugging.

Bob's Method of Coping With Stress

Bob has tried several strategies to cope with stress, including taking advantage of training opportunities at Fort Devens. He has taken courses that can help him acquire another job such as interviewing skills and resume writing. He also reads a lot. He particularly enjoys reading books in the positive thinking genre, like those written by author Norman Vincent Peale. He says that these activities make him feel better, but still he wonders, "Am I really just keeping myself busy and not actually doing what I need to do to be employed?"

Bob expresses concern that his methods of coping are cerebral rather than active. He spends time planning, writing and thinking about options, checking on job listings, and helping others. The fact that he has not achieved results for himself bothers him. He seems to have hope that if he waits it out, something will develop right here, and he will not have to disrupt his life.

Actually, Bob admits that he is ready for a career change, but he needs help. However, his desire to please others seems stronger than his ability to take action on

his own behalf. He would like to take advantage of the retraining funds that are available, but he has not identified an occupation that he wants to pursue. He laments that the idea of starting a support group at Fort Devens for the future displaced workers had never been implemented. Bob feels that this would be very helpful because "a lot of people do not have any idea where to start." This certainly seems to be true of Bob.

Bob explains that he had previously injured his back, and that exercise was important to avoid a recurrence of the problem. The opportunity to exercise during the work day drew him to join Fit to Win. Further, he says that he wanted to be an example to his employees and go to the program as one method of coping with stress. He also wants to utilize what is available at Fort Devens now because he realizes that his next employer probably will not have the facilities that have been available for his use at Fort Devens.

One way that Bob manages stress is by exercising. He found that the Fit to Win Program was very helpful in managing stress. He has also realized other benefits like losing weight, lowering his cholesterol level, and overall feeling healthier and better able to cope with the demands at work.

I suppose part of it is that you get your mind off of everything else. You've got to concentrate on following the instructor. Plus just the physical exercise does tend to relax you, relax you muscles, relax your body. It seems to do the trick.

Bob feels that it would be worthwhile if people could be given time off during the day to exercise. However, he has not kept up with the exercise because his schedule is so hectic.

Carol

Carol is a 53-year-old woman who has worked at Fort Devens since 1981. She is open, friendly, and caring. I imagine that she remembers her friends' birthday and invites individuals who are far away from their own families to join hers for Thanksgiving dinner. She is professionally attired in a floral dress and matching jacket, which does not hide her plump figure, but outwardly expresses her motherly and congenial manner. She is now a GS12 Supervisory Financial Manager with 18 years of federal service. I asked Carol to briefly tell me about her career progression at Fort Devens. Basically, she entered government employment after her children were in school. Her husband retired from the military at Fort Devens and then got a civilian job on post. They bought a house in the community, and Carol found an entry level position in budgeting at Fort Devens. She has been promoted several times, primarily by switching from one directorate to another, gaining more responsibility and experience with each position.

Carol contends that base closure has not really had an impact on her personally, although it has professionally. She seems to separate her work and family life.

After work I go home. I am not a social person. I do not attend most functions on the installation. I do not belong to the Officer's Club. I will go when they have Right Arm Night or Boss's Night or something like that. But my husband and I are not party people or anything like that.

When I ask Carol about the impact of base closure on her, she responds in a sincere manner that she does not feel she is under as much stress as other people. Since her husband has two retirement annuities that he receives monthly, she knows that they have enough income to pay their bills. Furthermore, they do not have an extravagant lifestyle.

One concern of Carol's is putting in enough time with government service to receive her own retirement benefits. She has been carefully calculating whether she has enough years of service to retire at the same time that the post terminates operations. Her options are to relocate now and continue working for several more years, or to find another closing installation that will give her a couple of more years of work, or to remain at Fort Devens and hope that there will be enough work during the closure process so that she can reach the retirement window. Her first preference is to "ride it out here."

Although Carol is keeping her options open, she really prefers to stay where she is now. One reason is that she

owns a home that she loves, with a garden and a swimming pool. She also has a close and supportive family.

Another concern is that while Fort Devens downsizes, Carol may end up in a position that she dislikes. Carol is not a veteran and is therefore more susceptible to earlier release than many other employees who also have 18 years of service, since military veterans receive preference in both hiring and reductions in force within civil service. But most importantly she likes a congenial work environment and is very aware of this need.

Well I'm not thrilled with the thought of a reduction in force. I know I would wind up in Director of Resource Management (DRM), and right now that's not a good place to be working. For morale factors. The people. I fully believe everybody up there just back-stabs the other one; it's not a good place to work. And I really don't want to have to go to work up there. I don't need stress when I work. I have to be happy where I work.

Although Carol does not feel that she is under a lot of stress because of base closure, she does feel stressed as a supervisor. It is painful for her to make difficult decisions about her employees' jobs because she knows how badly they need their jobs.

The hardest thing that I have to do, as far as I'm concerned, is to tell other people that they don't have a job any longer. Probably every three months I'm going to be letting one of them go, and that probably gives me more stress than any thing else. It makes me sad in a lot of ways, because I know that a lot of people are just making it now. For instance, one person that I'm letting go is on her own, I know she just purchased a new car, and I have to tell her she doesn't have a job. And the other one, her husband got out of the Army maybe six months ago and does not have a job, and now she won't have a

job and they have two little children. And it really hurts to have to tell someone they're not going to have a job.

Carol comments that individuals at Fort Devens seem to be having difficulty finding new jobs because the economy is weak. She shows great concern for her employees. She explains that one employee whom she has to let go is a single mother, another one's husband is out of work, and another single woman just bought a new car. She feels obligated to keep her workers informed so that they can make the best decisions for themselves during this period of upheaval.

Sometimes I tell my employees too much and that might get me in trouble sometimes. But I would rather be up front with them than to just have them walk in and hand them a letter. I guess that's the way I would want someone to do it to me. And I guess also, especially if they're providing their own livelihood, I want to give them ample time so they can get out there and try and find something.

Other elements of base closure that affect Carol are the heavier work load, a decreasing budget, and a reduced work force. However, she seems to thrive under this type of pressure.

I cope very well with it, I think. The busier I am, the better I like it. My husband has always told me that if I ever had a job that didn't have enough work to do, I would find the work to do, because that's the way I am. So I think I'm coping very well with it. Every once in a while the girls will tell me I look tired, but, other than that I'm okay.

Carol's Method of Coping With Stress

Carol attributes her low stress level to solid financial management. She and her husband live modestly but comfortably. They do not have a lot of expenses, and if they charge anything, it is paid off immediately. She says that if they cannot afford to buy something, they save for it and purchase it later on when they have the full amount. She says that "if you're the kind that lives from paycheck to paycheck, you're going to have some stress. But we've known this was coming for three years." She obviously knows how to plan, organize, and monitor her resources to ensure her security.

Carol has a son who also works on post and lives at home. Although he previously had trouble with alcohol and drugs, he has successfully rehabilitated. She is extremely confident that he will be just fine even though the base is closing. She believes that he is intelligent and personable, and he will make it no matter what happens. He continues to faithfully attend his 12 step program, and he helps others in their recovery as well. She is very proud of him and says she does not worry about him.

Another reason why Carol seems to be resilient is based in her 20 years of experience as a military wife. She had to handle moving constantly, several times overseas, and taking care of family affairs while her husband was preoccupied with his duties at work. As a result, she became a responsible and organized decision maker.

As a young girl growing up in a small town in Missouri, Carol watched as the local children grew up, married one another, and stayed to work and raise families in her home town. While she did indeed marry a local boy, he joined the Army, and they moved away. When she was a teenager, she told her mother that she was going to move out of town. She now reflects on herself: "I've always been the kind of personality that doesn't let unexpected things bowl me over."

Carol joined the Fit to Win Program because it was sponsored by her organization, the Directorate of Personnel and Community Activities. She did have some specific objectives. She was very pleased with the results but admits that it was only temporary.

Well I joined Fit to Win to lose weight, but also for cholesterol. I'm on the border. And it did lower my cholesterol quite a few points, and my blood pressure. And I did lose ten pounds. But those ten pounds are back. (Laughs)

Aside from finding the time in her very busy schedule to participate, the camaraderie and competition were invigorating. In addition to the exercise, she also thought that the nutritional education was excellent. However, she indicates that actually changing eating habits is not easy, even when you know it is good for you.

But my biggest problem is snack food. I love cheese, which is full of fat. Most of the nonfat or low fat cheeses just do not taste right to me. So my option is to not eat it. And I love potato chips and Fritos and that type of stuff, which is high in fat. While I was in the class I paid attention to the fat content, but I'm not

necessarily doing so now. But I do have the knowledge.

One suggestion that Carol had regarding the Fit to Win program is to add more exercise and have fewer lectures. She feels that the exercise helped her to cope with stress. She thinks that workers would be healthier and more productive if they were given time off to exercise. Carol was pleased with the program and gives it praise.

Alma

Alma is a 39-year-old Puerto Rican woman who has worked at Fort Devens for seven years. She enters with a spring in her step and smiles broadly. The tropical print outfit and big bow in her hair are very becoming. She appears to have found a good balance between accepting who she is and striving to develop herself and take care of her family. She is a Personnel Assistant GS6 at the installation hospital, which, due to downsizing associated with base closure, has recently been redesignated a medical clinic. Prior to entering civil service, she was an enlisted soldier in the military and continues to serve in the Army Reserves on a part-time basis. She has had a series of clerical positions with increasing responsibility through the years that she has worked at Fort Devens. Her husband works full time for the Army Reserves on post. About a year ago, she contemplated divorce, but now their relationship has improved. They have two small daughters

who are in day care while the parents work. Alma begins by providing an overview of her employment at Fort Devens.

Alma tells me about her life just before she found out that Fort Devens would be closing. She was very involved in the community and was planning to settle in permanently. She feels that she had a very good situation, and intended to make her career at Fort Devens and retire there when she was 55 years old. She and her husband were having a baby and searching the area in order to get a good buy on a house. Luckily, they did not purchase a home prior to learning that the base was closing.

Alma has been dealing with the extra stress of being in a duty position where she must advise and comfort other employees who are losing their jobs, while she will also be losing her own job within the next year. She sees the impact of the stress on base closure on others and she feels it herself.

Being that I work in the Personnel Department, I really see the stress of base closure more than anybody else because we've got lots of employees that come up crying, saying they just don't know what to do, where to turn saying, "I'm losing my job, I don't want to move, I don't want to sell my home, I'm stable here." And we really have to talk to them and calm them down. People don't know how to handle it at all. It makes me sad. And it hurts a lot because I'm in the same situation because I don't know what to do, which way to turn to, what do I do about whether to relocate or not to relocate. It's really hard. You just don't know which way to go or which way to turn to. You become very indecisive.

Alma is concerned that individuals without managerial experience are now in positions that they would not hold if

Fort Devens was not closing. She thinks that this causes additional personnel problems that she must help resolve. She counsels people who range in emotions from apathetic to confused to angry. Everyone has the stress of "doing more with less." Alma is also finding that as people find other jobs, those left behind have to do their work. She is doing two jobs now and finds that she is having difficulty keeping up with all of the demands at work.

Alma feels that her family is handling the stress fairly well. After a great deal of indecision, her family has developed a plan to relocate to Hartford, CT, to be closer to their extended family. She is very optimistic about a priority placement program that the Department of Defense has for dislocated employees. She is counting on the priority placement program to find her a job and then place her husband in the same geographical area.

It took me a while to make this decision, because I was also in this same position of, "What am I going to do? What should we do?" We knew that I was losing my job first because they had told us that was it. And then I started saying I didn't want to go out towards Boston, because I didn't want to commute an hour away. You know, I have the kids to think about. It was a hard decision to finally say, "Let's just go. Let's just do it."

The plan to relocate is simplified for Alma because she does not own a home at this time. She is well aware of the problems that people have had when they have accepted positions elsewhere but could not sell their real estate or had to take a loss on it. Although she originally wanted to settle in this area, she has reluctantly accepted the fact

that she will have to move when the time comes and is relieved that she does not have to contend with the problem of selling a house. However, she has lost a dream.

We wanted to make Massachusetts our home, that was our goal. This has been a real disappointment for us. I wanted to raise the kids up in this area.

Since learning that Fort Devens will close, Alma has had many thoughts and emotions that she has had to process. She has been feeling sad about the loss of her job and the loss of her sense of belonging to a community. She is fearful about whether her family can survive on only one income. She is terrified that she might end up on welfare or food stamps like other members of her family, and does not know if she could deal with the shame. She says, "I don't want to go backwards; I want to go forward. Unfortunately, I want to catch up with the Joneses."

Alma's Method of Coping With Stress

When asked if she worries that her plan to move to Connecticut may not materialize, Alma says that her spirituality helps her get through times of difficulty. It gives her inspiration and helps her to go on even when she is confused or afraid.

I've been praying every day. I've been saying, "God, my life is in your hands." Let's see how it works out. But I feel pretty good about it. Yeah, there are times when I do think, "Are we making the right decision?" But, I think we are. Or maybe I'm talking myself into it. [Laughs] Praying gives me a spiritual lifting. To me that's important. It's just amazing. I do feel a lot calmer. What my religion is, I don't know

anymore. But I know that I do pray, and that's what helps me.

Alma believes that there are things that could be done at Fort Devens to help people cope with stress. She believes classes on stress management could be offered and made available to every employee. Also, she believes that management should be more compassionate, lenient, and understanding.

Because of stress, Alma had been suffering with severe headaches on a daily basis. Her doctor explained to her that she was exhibiting symptoms of stress and prescribed a muscle relaxer. He also strongly advised her to exercise. That is when she found out about the Fit to Win program. Upon participating consistently in her exercise regime, she was thrilled that she was able to discontinue her medication. She joined Fit to Win with the purpose of coping with stress, and it has been very helpful in achieving the desired results.

I try to exercise every day. I do stretching exercises. I still do the crunches or the sit ups, and I do the walking on the treadmill. I go to the gymnasium or I use the one in physical therapy in the hospital. I fit it in early in the morning and then I'm refreshed to work. I've got all this energy. And then at home I'll do a little bit of the exercises. I'll get the kids jumping around, and that's fun. And that's basically what controls my stress.

Alma has turned to her family to find peaceful and pleasant times during this period of stress. They have slowed their pace and have learned to enjoy their time at home together. They spend their recreational time together

talking, reading, playing games, and listening to the radio. She treasures this time with her children and husband, and believes that their life has been enriched by the choices they have made to focus on the family and homelife while the outside world is so unpredictable right now.

Better nutrition, something learned at Fit to Win, has also helped Alma to cope with stress by changing her eating habits. Instead of frying foods, she bakes. Her family take the skin off the chicken, eat more fruits, always eat breakfast, and drink juice or milk instead of soda. Alma is feeling the benefits of these lifestyle changes.

I feel a whole lot healthier. I don't have colds like I would normally have had in the past. I've only had one cold so far, and it didn't last long. It was just something that stood for a little while and then went away.

Alma thinks that more exercise in the program would further improve it. She also would like the program to be longer than eight weeks. She thinks that exercise helps workers to do a better job at work. Alma found the Fit to Win Program to be worthwhile and highly recommends it. She liked the acceptance she received and progress she made during the program.

Mindy

Mindy is a 32-year-old woman who has worked for the government at Fort Devens on and off since 1980. She comes into my office and politely seats herself while I finish a

phone call. She adjusts her long denim skirt and complementary country blouse with a denim yoke, and patiently waits for me with folded hands and a smile on her face. She is now a GS9, chief of assignments, terminations and housing referral. She is originally from the local community and started working at Fort Devens after high school. She returned after her husband's tour with the Coast Guard ended. She has worked full time while raising two children with her husband.

Mindy tells me what her regular routine was like just before the base closure announcement.

I'm kind of routine-oriented. I get up in the morning and do the same thing every day, and come to work. My idea was that this was going to be my job, somewhere in the government here at Fort Devens probably in housing until I retired. So I always was trying to improve or take classes on housing, and the networking associated with housing. That was something that I was just really involved in and excited about all the time. Didn't really worry about looking for any other jobs except for promoting myself within the division and helping others that worked there to do the same thing. I didn't worry about anything but housing and what we were doing there. Then, I would go home and cook dinner and help the kids with their homework and take them to their functions. They had sports activities that they were involved in. And then spend time with the family until it was time to go to bed.

Mindy explains that she has a lot of stress due to base closure because she is the primary income and benefits earner in her family. Her husband was out of work for a long time but now has been retrained and joined his brothers in a family-owned business. She was planning to work at Fort Devens until retirement, and she is distressed

about not being able to continue to work in a situation that is comfortable for her and which also has provided a secure lifestyle for her family.

Mindy explains that her husband's unemployment and retraining has had a significant impact on their lives. The State of Massachusetts sent her husband to school for heating and air conditioning when he could no longer find employment in the construction field. He joined a business that his brothers started five years ago, which is doing well, but the family still needs two incomes. Therefore, they would really like to stay in this area now. While the focus has shifted from a focus on her career to his for stability, she voices a strong need for her own career.

I was going to pursue my career because his was nowhere. And at that point in time, I said, "Well, there's nothing here for you, why don't we look on my side. I can probably stay with the government and move somewhere."

So plans for my career have changed. Now I have to be supportive of his career. The man usually wants to be the bread-winner anyway and if he can, that's fine with me. [Laughter] But I want mine too. I want something that is mine, my job, my career.

Mindy's Method of Coping With Stress

Mindy suffers from extreme anxiety. She says she is very hard on herself and questions whether it is because she is a Virgo, someone, she explains, who is a perfectionist. She feels guilty and blames herself when things go wrong, and she spends a lot of time worrying about the future. She is trying to do a better job of

distinguishing what is really important and concentrating on those things. She also believes that she is coping better with losing her job because she is not making believe it is not going to happen. She is preparing herself for base closure, and this helps her to alleviate stress.

Mindy finds it extremely helpful in coping with stress to be informed about the situation. It makes her feel more in control, which makes her feel more comfortable.

I like to have a little control on what is happening. I don't like to say, "I have no idea." I like to kind of know what's happening. It's easier for me to deal with things if I do. My husband says, "Oh, you're on that power thing again." I don't think it has anything to do with power; it just makes me feel more comfortable to know as much as I can about something. That's all.

Mindy is also arranging for retraining. Just as her husband was sent to school by the state, a similar funding program is available to Fort Devens employees. She plans to build on her experience at Fort Devens and get an Associate's degree, majoring in Office Management. This training program, along with the prospects of severance pay, has propelled Mindy into a comfort zone in which she can safely ride out the transition.

So I think that has cured up so much of my anxiety. Because now I know where I'm going. I don't have to wonder anymore. I have a plan and I know where I'm headed. I don't have to worry about paying for that and trying to save money for this. So that really was a big help.

Another way that Mindy is coping with change is by reading self-improvement and inspirational books. Self-discovery and spirituality are helping her to accept

her own idiosyncrasies and build self-esteem. She understands herself better, likes herself more, and is enjoying life to a higher degree now. By reading these books, Mindy feels more centered and peaceful.

Additionally, Mindy has also taken up a new hobby, sewing, which helps her to relax.

I got a new sewing machine. I made Christmas things, and I just really enjoyed that. I'm trying to take the time for that for me. So now when I am home I have something to do. I don't have to wish that I was at work or that we go away or do something. So I'm trying to get more hobbies that are more interesting.

Mindy recognizes that much of her stress is self-imposed. However, exercise, reading, college courses, hobbies, attending church, and counseling help her to manage her time and stress. She tells me that being very busy helps her to worry less. She feels that keeping occupied with interesting activities prevents her from being bored and dwelling on the uncertainty of the future. She used to get in a rut and feel that her life had no meaning, but she does not feel that way anymore.

Just before signing up for Fit to Win, Mindy recognized that she was undergoing a lot of stress, which she attributes to base closure. Her doctor recommended an exercise program. Mindy thought that the combination of exercise and learning about nutrition in the Fit to Win program was a worthwhile idea. She has continued to exercise frequently and watch her diet carefully. It has significantly reduced her stress level.

I was going through a period of a lot of personal stress and internalizing it. My doctor said that I needed to develop a health routine. I've always liked physical activity but have never been a regular participant. So when this came up, I did it. It's helped me to be more physically fit and relieved much of my anxiety.

Although Mindy would not change anything about the program, she would definitely like to see time being allotted so that everyone can continue to exercise during work. She thinks it would be beneficial for both the individual and the institution.

Tom

Tom is a 47-year-old man who has worked at Fort Devens for seven years. Although short, he is not diminutive. He seems calm, reserved, genuine, and solid. Tom looks like a real New Englander—crew neck sweater, corduroy pants, short haircut. I am surprised to see that he is also wearing cowboy boots when I anticipated penny loafers. His face does not look as if it lights up with a smile very often, but it may be due to a lack of joy and excitement rather than caused by any negative emotions harbored inside. He is a GS9 guidance counselor at the Education Center. Prior to entering civil service, Tom was an enlisted soldier and, later, a guidance counselor in a nearby school for children with disabilities.

Tom talks about the impact of downsizing on his work section. Several people have been reassigned, and the workload has increased tremendously. However, because he is

a veteran, he has stayed in the section while others have been reassigned. A typical day in Tom's life includes a packed schedule of clients at work. He describes his work environment as very stressful.

And so what we've done is just gone to first-come, first-served, walk-in basis and everybody just has to wait their turn. Like I said, people have to sit for a long, long time, and it's not good. Some people understand why they have to wait, and some people are not accepting as to why they have to wait. And it can cause people to have short fuses and to be extremely impatient--downright nasty in some cases--by the time they finally get to you. So it's been a very stressful place to work at certain times of the year. At certain times of the year it's slow, there's no stress at all, but then there's times that it's a real zoo.

Tom comments that his work section has always been stressful, but now, with base closure announced, it is even more so. He mentions another counselor who has been reassigned to another office. The other employee has several medical problems, but he seems to have better health in his new position. He believes that stress contributed to his illness.

Tom discloses the reasons why he prefers to stay in this area rather than move. He has a lifestyle that is very comfortable for him. He also has hobbies that he enjoys immensely.

I don't really want to move because I've got a barn and I've got antique cars I've been wanting to restore. And I've been wanting a horse real bad for a while now. And if I moved, I'd have to give up a lot. If I left, the chances of getting back to this area would be damn slim until retirement age.

I live near the pond and I love to fish. There's real nice bass in there and the state stocks it with trout every year. I've got a situation right now that would be real hard to duplicate.

Although Tom lives alone and is not married, he takes his obligations toward caring for the family homestead and some elderly relatives very seriously. He owns a large house with four apartments. He lives in one of them and derives great satisfaction from taking care of the building and grounds. He takes pride in the fact that he is the third generation of family who has lived there. Furthermore, he has two elderly aunts who live nearby who refuse to move out of their own homes. He calls them "independent as hell." He also has a cousin in his mid-fifties who is severely handicapped. Tom does a lot for these members of his family, and he does not know how they will get along without his help if he has to relocate due to his job.

Tom is concerned about leaving government service because he was treated for an odd seizure that, although undiagnosed, sounds suspiciously like a mini-stroke. He discusses the problem and his anxiety about losing health insurance.

But anyway, the doctor didn't know what it was. And I said, "Well, what effect is this going to have on my health insurance?" "Oh," he said, "don't change your insurance." I was refused a life insurance policy about 15 years ago for carpal tunnel syndrome because I had sore hands from pulling shrubs out in front of the house. And that was a real eye opener to me. And now he says don't change your insurance. Unless Clinton's health insurance comes through, I'll be screwed. They'll put me in some high risk group and it would cost me a fortune. I couldn't afford

my own insurance. So that's another reason why I need to stay with the government.

Tom expresses a strong desire to continue with federal employment. His benefits and federal retirement are very important to him. He is concerned about the government cutbacks and how it might be difficult for him to get another government job. While he also reveals a desire for some adventure, it is balanced by a strong sense of duty.

On the one hand I would not mind at all moving to some place like Ft. Huachuca, Arizona or even Ft. Carson, Colorado. Out West, yeah, it's beautiful out there. If some of those responsibilities weren't there, I could move out West. That's if I could work something out in terms of finding somebody to just live in the house and watch it, but that's not realistic. Just isn't realistic at all. If you got people in there, they would trash the place. With nobody really right there to keep an eye on things. And I know that. So what I'm really trying to do is find another government job around here. Right now that's the bottom line.

Tom's Method of Coping With Stress

In general, Tom takes good care of himself. He likes being fit and active and he feels that it helps him to deal with stress. Aside from exercise, Tom says that he does not do a lot to control stress. His off-duty life is filled with hobbies and chores that keep him very physically active. He is, however, considering taking an adult education course.

I was just looking through a brochure from Life Learn the other night. And they're going to run this course on meditation. And I've thought about maybe trying that. I know some people swear by meditation. They say it's just terrific. But I would rather go out and ice skate. Or I would

rather go out and run. I live outdoors, I don't like being inside. I'd rather do anything outside. So if I can exercise outdoors, that's the best of all worlds for me. That's what I like.

Tom believes that his spiritual beliefs and practices help him get through difficult times. He prays for guidance about what to do regarding a job when Fort Devens closes.

I go to church. I was brought up Catholic, and I still go to religious services. Just about every week. I feel that religion can certainly be an influence on your life, and a very positive one. I believe in prayer. And when times are bad, or when times are good, either way, you can get a lot of strength out of religion.

Tom explains that he joined Fit to Win because it was wintertime and he could not get outside to exercise. It was too cold and also dangerous to run outside on the dark and icy streets before or after work. He says that he is a firm believer in the connection between mental and physical well-being.

Now because there's snow on the streets, I haven't run for a week, and geez I can feel it. My mind slows down. It's not just the body, but your mind too. It just works together.

Tom would like the Fit to Win course to continue. He believes that Fort Devens would benefit if employees could exercise during work time.

I would still love to be in Fit To Win. I wish it was still going on. I wish I could go to it everyday, five days a week, fifty-two weeks a year. I thought it was absolutely fabulous. I've got to exercise. I can't stop exercising.

Tom enjoys experimenting with different types of exercises even though he does not like them all. He does not have a lot of time for exercise, so he tries to be very

selective about it. Tom cannot think of anything that would make Fit to Win better except making it longer. Someone had recommended it to him, and he now recommends it to others. For him, Fit to Win was one of the greatest experiences in his life.

Jim

Jim is a 36-year-old man who has worked at Fort Devens since 1986. His short, stocky frame seems to house a creative, restless, discontented soul. His huge brown eyes smolder with intensity, and his voice commands attention with tone, volume, and depth. His sweatshirt barely covers his belly, which is probably the result of years of eating and drinking to try to fill some kind of hunger or unfulfilled need that is readily apparent in Jim. He is a GS10 Contracting Specialist. Formerly, he was an Air Force officer. He originally came to Fort Devens to be in charge of the Performing Arts Program. An overview of Jim's employment history at Fort Devens shows a lot of turmoil and disappointment. His original job was abolished, and he had a series of reassignments and difficulties with his supervisor.

Jim gives an example of his boss creating a position for another employee who was going to be reassigned during a reduction in force. The boss evidently worked diligently to keep an employee that he favored, while ignoring Jim. Jim feels that he received callous and unfair treatment.

Jim talks about a period of time when his boss took a six-month tour in Saudi Arabia during the Gulf War. During that time, Jim's relationships with his temporary supervisors were very good, and work went well. This was about the same time that base closure was announced. It was at this point that Jim believes conditions at work started to deteriorate.

And he wanted to expand our horizons. I talked to him about ways that we could actually generate revenues, as well as save money. And there were a lot of plans in the mill. A lot of purchase requests were going towards expansion of it when the closure was announced. About that same time, matter of fact I think that same week, was when my boss came back. So it's hard to say whether everything went to shit when my boss came back or when the closure was announced or probably a little of both really.

Jim explains what work was like before it was announced that Fort Devens was going to shut down. Employees were productively engaged in their work, and their attitudes were positive because Fort Devens was expected to expand with the relocation of Information Systems Command. He also tells of the disappointment when that decision was reversed and Fort Devens was placed on the closure list. He says, "I think that everybody on base felt a major letdown."

Along with base closure, disharmony with his boss, and job upheaval, Jim has been under a tremendous amount of personal stress.

To tell you the truth, the entire time this happened at work, the real stress has been going on in my personal life. Last February, my father had major surgery, and a cancerous tumor was

removed. I went home a lot while he was sick. Well, just last week, he died. Yeah, and my grandmother died close to two months ago. There's been a lot of things causing me a lot of stress. I don't know how much stress the actual work environment and base closure has caused because it's sort of all been lumped together for me. I know that everything is bothering me recently.

Jim is suffering from low self-esteem at this time. He wonders about the source of the problem. He contemplates whether the problem is rooted in the organization or in him.

Then another thing about work that bothers me of course is when you're under a lot of pressure, a lot of stress, and support is being pulled away from you, you begin to, if you're overly critical like I am, you begin to wonder how good a job you're really doing. And so on the one side, you see yourself getting the shaft professionally, and on the other side, you're wondering whether you're worthy of anything. Oh, my self-esteem is plummeted.

Jim is suffering with classic symptoms of stress. Even his passion, the theater, is not giving him much satisfaction. He seems to be exceptionally aware of responses from others, which he interprets very critically. He is also very introspective and is quite aware of changes going on inside of himself that are unpleasant.

Another thing, and I'm not sure how much of this is self-imposed, from other recesses of the mind or whatever, but I've always been extremely successful in theater and ventures like that. But in this past year, the projects I've done I felt have fallen short. I don't know if that's really true or not, but with any sort of art form, there's like something inside you, some sort of feeling that you know it's right and everything, and that's been very much lacking this past year. I am just succumbing to mounting stress. I don't know what it is, but I know that the projects I've worked on this year have been less fun, fallen short of my expectations. I don't know how

the audiences reacted. They still appear to be accepting everything quite well but I don't know, I feel distracted most of the time.

Jim explains how powerless he feels right now. He has been trying to do a good job but believes his boss has blocked his efforts. When he complained to higher officials about his boss, he found out that even if his boss was wrong, that because he held a position of authority, his boss was allowed to make decisions whether or not they made sense. Jim feels a loss of control and helplessness.

And I'm not sure which was more stress: Watching all this bullshit happen or once I decided to tell someone about it, the amazing, "So what?" response that I got from everybody. This makes me feel terrible. You know, they train you in a military environment, if such and such happens, it is your responsibility to do something about it and report this and report that, and the minute you do something, all of a sudden, "He's a trouble maker, let's get rid of him."

Jim expresses fear about losing his job. It has been difficult for him to support his family in Massachusetts because of the high cost of living. He is very concerned about losing money if he had to sell his house now because property has depreciated. He does not know what he wants to do when Fort Devens closes. Although he would not mind continuing his federal career, his experiences have soured him for continued employment with the military. He believes that new Army officers come into the organization every couple of years and demand radical changes without listening to the advice of civilian employees who are experts in their occupations. He finds it frustrating and demoralizing to constantly adapt, and to watch the results

that inadequate management and inept decisions impose on the programs for which he is responsible.

Basically they tell you how to manage your facilities when they don't know the first thing about it. And then they yell at you when it doesn't work out. You go, "I only did what you told me to do." Well, it's frustrating, but you learn how to deal with it. You learn how to make it bearable. I've done that, I guess I'm just tired of doing that.

Jim imposes a lot of stress upon himself. He has very high standards which he finds difficult to meet. This leads to frustration. He describes himself as a perfectionist. He voices extreme annoyance with being given short deadlines and being forced to produce something substandard when he would prefer to be given more time so that the quality would be improved. He strongly connects his sense of self with his work.

Jim describes his usual routine which is very hectic. After a day that is usually filled with frustration at work, he often grabs fast food for dinner and rushes to rehearsal for a show either as an actor or a director. He likes to go out with friends afterwards and gets to sleep around 1:00 or 2:00 A.M. He has a difficult time getting up in the morning and arriving for work on time at 7:30 A.M. He says that this schedule can be very tiring as he gets older.

Jim speaks freely about how his family life is being negatively affected by the stress of potential job loss and current financial troubles.

Perhaps some of the tensions that are felt in home life are because of the fact that you are eventually going to be losing your job. And you don't know whether or not the job that you're going to get in the future is going to be able to pay the bills. So obviously there's stress and tension there. I've heard about statistics before where financial problems is one of the leading contributors to the high divorce rate in the country. And certainly when a situation like this occurs, that's going to exacerbate itself. And you know, of course, you get into arguments all the time.

Jim elaborates on how difficult it is to make decisions about his future. He is trying to weigh his options but also is displeased about benefits that are not available to him. Even though he served in the Air Force, he is not eligible for veteran's benefits because it was not during a period of armed conflict. Therefore, he is not entitled to special privileges during reduction in force or educational benefits that would pay college tuition. He says that he has an incredibly varied background, but is not really a specialist in any area. He just does not know what direction to turn and feels very agitated and indecisive.

With all the stress in different areas of his life, Jim mentions that he is surprised that he has not broken down from it all.

It's sort of like a cancer. It sort of seeps into every aspect of your life. So, yeah, there have been a lot of other stresses, but it's very difficult to put your finger on them, because they're all sort of inter-related, I think. But, yeah, it's been an incredibly stressful time. I'm amazed I haven't had a nervous breakdown, really.

Jim's Method of Coping With Stress

Jim is intensely involved in theater as an avocation. This helps him manage stress by giving him a creative outlet and a boost in self-esteem.

I do theater. Even though I haven't been fully satisfied with what I've done, I still get a kick out of it. And I still know that, as cocky as it sounds, I'm still better than most other people around, either directing or acting or whatever. So I do it. Doing the theater is very therapeutic to relieve the stress, at least for those few hours that you're at rehearsal, because you're concentrating fully on something completely different. During that time, I don't have to sit around thinking, "Oh, my God, what am I going to do next year?"

The other thing that helps Jim cope with stress is fighting the system. Even if things do not change, he does what he feels he needs to do to bring it to the attention of people in authority. He has not given up.

The one thing that I do is fight. I'm always fighting something these days. I'm in the middle of a grievance right at the moment; in one way I feel that that helps to relieve the stress because I'm getting something off my chest.

Jim had several sound reasons for joining Fit to Win. He has some habits that are not healthy, and he knows it. He admits that he smokes too heavily and is too fat. Although he is the son of a restaurateur, he knows very little about nutrition because his father planned the menus. While he was raised in commercial kitchens, Jim acquired the habit of picking up something in a hurry. Now he frequents fast food meccas like McDonald's. He says that he joined Fit to Win to learn about nutrition and to look and to feel better.

Jim made some progress in Fit to Win, but his father was ill during this period of time, and as a result of the emotional turmoil, he missed many classes.

Right in the middle of that I had to go home for three weeks because that was when my father was operated on. So there was like a big break right in the middle of it that kind of screwed everything up, and when I came back of course, my head wasn't screwed on straight.

He believes that the Fit to Win program would have helped him if he could have completed it properly.

But I'm sure it helps. And I know, had I gone through the program and lost my weight, which I know I can do, I know I'd have felt great and the stress would have been far less. I would have been able to deal with things a little better.

Even though Jim disliked the exercise in the Fit to Win program, he felt better after doing it. He wishes that he had lost weight, but he does have a better understanding of nutrition now. Jim admits that after Fit to Win, he is now equipped with the knowledge to take better care of his health, but he has found it difficult to change. Jim thinks that both the employees and the government would benefit from permitting employees to exercise during work.

After the initial interviews, I conducted follow up sessions with each person in order to determine if their lives have changed during the interim. I was interested in finding out what actions, if any, the subjects were taking in response to base closure getting closer, how they were coping with it, and generally anything else that they might like to contribute to the study. Some people's lives were

changing course and moving in new directions. Others had not yet entered the currents of change.

Follow-Up Interviews

Bob indicates that many of his employees have been terminated or found jobs elsewhere. He has lost half of his staff, and his work load has dropped 25%, causing a redistribution of the heavier workload to those who remain. Soldiers are temporarily filling in for positions previously occupied by civilian employees. Also, the mission has shifted from conducting the daily operations of Fort Devens to performing tasks associated with closing the post. They have begun to vacate buildings and turn in property. The installation commander has decreed that everyone will have fun while they close the post, and Bob has found himself in the middle of some ridiculous undertakings.

I spent all last Thursday obtaining a coffin from a local funeral home for a party held at the Officer's Club Friday night. The idea was that at midnight the commander would jump out of it. There's some strange things going on.

Some important news from Bob is that he is going to become an entrepreneur. He answered an advertisement in the newspaper and attended several meetings. He plans to start an electronics products distributorship, working right out of his own house. He believes that there is the opportunity to make a lot of money, and said, "Some of the people that

are in it are 29-year-olds making \$100,000." He also hopes to realize some of his own potential.

At the very least it will be a learning experience. Something I can develop a side of my personality that hasn't been too well-developed. Being outgoing and assertive, more extroverted. Very much different than I'd generally seen myself, but I think it's time to re-invent myself.

Bob attributes his actions partially to our previous interview.

I have to say that perhaps the interview that we had before was kind of a spur to that a little bit, because it kind of got me thinking more about everything. I think the original interview was kind of sad or something, about how bad things were. And it kind of got me thinking more, and maybe contributed to that.

In a later conversation, Bob disclosed that he abandoned the idea of starting his own business. He felt that the sales portion of it was just too far removed from his natural personality. He indicated that he was not extroverted and aggressive enough to be successful in such a competitive career field. He thinks he is better suited in the helping professions. He is now resolved to stay at Fort Devens until the very end, unless he gets placed into a job with another federal agency in the commuting area.

Carol discovered that base closure is not happening entirely as planned. She finds herself coping with the fact that the organization she runs is disappearing very swiftly. In a short period of time, about twenty more positions will be eliminated. She did not anticipate that these changes would occur at this stage of the closure

process, so this has come as a shock to her and everyone else.

As a result, Carol's worst fear has materialized. She has accepted a reassignment to the Directorate of Resources Management. She has calculated that if all goes well, she will be able to stay with that organization and retire in place when its operations cease. She has weighed her options and made a decision. While she is very disappointed in the turn of events, she is also determined to cope with it with a positive attitude.

I'm not thrilled at going to the Directorate of Resource Management. But I would prefer to do that for two years, and be able to retire, than to pick up and sell the house and move elsewhere at this point. It is what I dreaded, and I didn't want it to happen, but when I sat down and weighed the pros and the cons, I really didn't feel like I had a choice. I had to take the job. When I make a decision to do something, I'm going to live with it, and make the best of it that I can. That's what I'm attempting to do.

Alma lost her job when they closed the hospital. She is on severance pay and also attending college full time in a fully funded training program for displaced workers. She recognizes that some good has resulted from the upheaval. She seems very optimistic about the future. In fact, she is excited about continuing her education and is confident that things will work out well for her and her family.

I still don't know what's going to happen to my family but I'm getting paid and going to school, too! I will finish my nurses' training and be able to get a job wherever I want. Then we can move to Hartford if we still want to. My husband still has his job here, so maybe we'll stay.

Mindy still has her position in the housing division of Fort Devens; however, she has also started a fully funded training program at the local community college. She is completing her Associate's degree in Business. She gave herself many excuses previously which held her back from pursuing her education. Now she feels free to do this for herself because the State pays for it, and she is, after all, going to lose her job next year. Adding school to her schedule has enriched Mindy's life and she seems much happier.

I'm going to school two nights a week now. I wanted to continue my education before, but it wasn't something that I had to do, I said, "Well, I'll get to it, I don't really have the time, the kids and what they are doing is more important and I don't want to be out every night of the week." But since I think that the education is going to help me in the long run, with the base closing, I've made myself a lot busier. I'm enjoying it, even though it is hectic, I'm enjoying it.

Additionally, Mindy says that her relationship with her husband is improving. They now communicate much better, especially about subjects that cause distress, like base closure. She is discovering that she can actually discuss topics with her husband, engage in confrontation, clear the air, and get the support that she needs from him.

Things have gotten a lot better, and I find that I open up much easier than I used to. I was always the person that didn't talk. If something was bothering me, you'd never know. But on the inside, it would really work on me. So now, we talk a lot about base closure and what's going to happen.

He kind of puts my mind at ease a lot of times because I'll think, "Well, this is really going to be a problem." But after we've discussed it, as far as he's concerned, it's no problem at all. So you know, it works things out, makes it a lot easier to be able to discuss it. He's very supportive. He really is. It gets more and more as we get older, and it seems to get better and better I guess.

Mindy still has to cope with the difficulties associated with the loss of so much of the work force when so much work still needs to be accomplished. She tries to remain optimistic and professional, but notices that it is easy to get a bad attitude because of base closure.

A lot of people are leaving. A lot of people are actively involved in what they're going to do when the post closes. So that takes away from what they used to do at work, because they're looking out for their own best interest too. They're trying to do both. And I'm doing the same thing. I've noticed that I've picked up on a lot of "who cares" attitudes from people too. "Well, the base is closing, why worry about it?" In a way, it's frustrating because I've found you don't get the helpful attitude that you used to get from places. But we still get the work done; it's just not as pleasant as it used to be. You don't want everybody to get depressed about it. You want to try to remain upbeat.

Tom has started to actively job hunt even though there is a remote possibility that there may be a position for him at the Reserve enclave after the base closes. But he is not counting on it. So he spends a lot of his time going to the outplacement office, networking with professional contacts, and following up on want ads. This is a new activity for him, and he is not altogether comfortable with it. However, he is determined to find a comparable professional position and continue his career with the

federal government in Massachusetts or anywhere else he has to go. He is not expecting something to land in his lap, so he is doing the hard work of finding another job.

If I find something that I want to do in the meantime, I'm going to grab it. I'd certainly take the job in the enclave. At least there's a possible backstop there that I didn't think was there before. It's still a very, very indefinite thing. But at least it's a possibility. I don't think it's a strong enough possibility to hang your hat on.

Circumstances have not changed very much for Jim.

While he said that he is very busy at work because of the lower staffing levels, he is also still fighting the system. Right now he is challenging a performance appraisal and position classification. Jim is concerned that the "old boy network" will prevail and that he will lose again. He has not given up his pursuit of "justice" and yet he is utterly disgusted by the system. He has not won anything either.

It's the type of thing that I just can't sit idly by and not try. They basically expect me to perform at a GS12 and rate me as one but not pay me as one. They won't upgrade my position. Oh, it's all a crock. The only thing that concerns me is if they decide against me, that will I be able to get access to the records so that I can rebut it. Because I know that I can rebut just about anything they throw out.

Jim applied for retraining funds to attend a six-week, \$7000 course for make-up artists in Florida. The request was not approved. He says he would like to teach theater at a university. Unfortunately, even if the funds were available, he does not know how he would support his family

in the meantime or if he would ever find a job upon graduation.

In this chapter we have seen how six people, confronted with the same two events, the closure of Fort Devens and the Fit to Win program, have each had separate and unique experiences. They permitted us to penetrate their private thoughts and feelings about impending job loss and how they are coping with the accompanying stress. The next chapter analyzes the affinities and variances among Bob, Carol, Alma, Mindy, Tom, and Jim.

CHAPTER 4

ANALYSIS OF THE DATA

All the people studied seemed very aware that they are involved in a situation that is very stressful. However, they are perceiving and responding to those stressors differently. In keeping with the definitions of stress in Chapter 2, to different degrees all of these individuals feel that there are pressures and demands being placed on them. They are aroused by discomfort and perceive threat to their psychological and social well-being. Some may also perceive that their life circumstances exceed their capacity to cope with the stress they are undergoing. Of the six individuals who participated in this study, two consider themselves to be under minimal stress, three are experiencing moderate stress, and one person is extremely stressed.

Life Change Units

The three different groups appear to be perceiving their stress at three different levels. In attempting to make some sense of their specific reactions, we need to measure the amount of stress each group seems to be experiencing. Rahe (1975) quantifies stress stimuli by assigning "life change units" to particular types of stressors. Referring to Table 1, it is clear that the group that stated they were under minimal stress, Bob and Carol,

are experiencing stressors from the major category of "work." We know that both of them will lose their jobs (57 LCU) and have more work responsibilities (31 LCU). One could probably also add 30 points for "trouble at work with persons under your supervision" since they are both very concerned about the welfare and futures of the workers that they supervise. Neither Bob nor Carol revealed stress in any other segment of their lives. Therefore, the first group of minimally stressed subjects has an average LCU score of 118.

For the moderately stressed group, all three have had the work related problems of losing their jobs (57 LCU) and having more responsibilities (31 LCU). Alma also faced health problems (25 LCU), a possible move to a new home (28 LCU), pregnancy (60 LCU), birth of a child (49 LCU), and marital reconciliation (42 LCU) for a total of 292 just prior to, concurrently, or immediately upon learning that Fort Devens would close and before signing up for Fit to Win. Mindy had health problems (25 LCU), change in arguments with spouse (34 LCU), spouse ending work outside the home (37 LCU), and major change in finances/decreased income (60 LCU) for a total of 244. Tom had a serious illness (42 LCU), major change in usual type or amount of recreation (30 LCU), and a major decision regarding the immediate future (45 LCU) for a total of 205. This group's scores ranged from 205 to 292, with an average LCU score of 245, which indicates moderate stress.

Jim has been exposed to extreme stress. Like the others, he had the problem of losing his job (57 LCU) and more responsibilities at work (31 LCU). Additionally, he had troubles at work with his boss (39 LCU), health problems (25 LCU), change in arguments with spouse (34 LCU), change in personal habits (31 LCU), change in social activities (28 LCU), illness and death of father (52 LCU and 66 LCU), death of grandmother (66 LCU), major change in finances/decreased income (60 LCU), and investment or credit difficulties (43 LCU). Jim's total score is 532 LCU. Rahe (1975) says that there is a strong correlation between scores of over 300 over a one year period and the incidence of some illnesses. Jim has expressed surprise that he has not had a nervous breakdown from all of the stress he's been experiencing. Unless something changes, it is highly possible that he will have a mental, physical or emotional setback from having so much unrelenting stress.

Mind-Body Connection

Bob and Carol were under minimal stress, and while they expressed discomfort with changing circumstances, neither one disclosed that he or she was suffering with symptoms of stress. In fact, both stated that they felt they were under less stress than other people. Their stress mainly showed itself in concern for other people and having a heavier work load.

Alma, Mindy, and Tom were under moderate stress and clearly stated that they were feeling it. Alma and Mindy had begun to have health problems. Alma had headaches, colds, and anxiety. Mindy was a chronic worrier and had free-floating anxiety. Both were angry and irritable, and this led to arguments with their husbands. Tom worried about his future and health, felt more pressure at work, and was afraid that if he didn't get the amount of exercise that he needed, he wouldn't feel good. All of these individuals were experiencing symptoms of stress and were uncomfortable.

These symptoms led them to seek out relief; they recognized that Fit to Win could help. They became driven to change their behavior because they were physically, mentally and emotionally dismayed. Evidently a moderate amount of stress accompanied by its symptoms can be a catalyst for change. Perhaps the GAS as described in Figure 1 not only alarms the body that something is wrong, but can also promote emotions of determination and enthusiasm that promote behavior modification in order to avoid future misery. These subjects took control with their positive attitudes. Alma, Mindy and Tom learned to effectively cope with stress, and by doing so they alleviated unpleasant symptoms and averted accumulated misfortune and agony. Furthermore, these people seem to fit into Selye's (1978) theory of redevelopmental adaptation. They were forced to readjust themselves to an entirely different activity in

order to regain homeostasis. Each one regimented better nutrition and exercise into his or her lifestyle. The result has been that their stress has been transmuted into eustress.

Jim has not been so lucky. Jim has been subjected to a significant number of stressors and is withstanding the loss and damage so far. However, the chronic GAS has depleted his energy reserves, and he is exhausted. He seems to be recharging himself with surges of negative emotions which thus far have helped him resist the dire effects of protracted stress. Too much stress, negative emotions, and deleterious behaviors have contributed to a serious state of chronic crisis for Jim.

Wellness and Distress

Bob, Carol, Alma, Mindy, and Tom, are experiencing base closure within the context of the Wellness Cycle as described by Charlesworth and Nathan (1984). They describe two cycles of stress: Wellness and Distress (See Figures 3 and 4). Both cycles are precipitated by stressful events or situations such as change, chemicals, decisions, disease, emotions, the environment, family, pain, phobias, social, and work stressors.

At this point, the model becomes bifurcated. The Wellness Cycle branches off with health promoting lifestyle responses. An individual will use coping mechanisms that include adaptive behavioral, physical, cognitive and

emotional responses. Examples are assertiveness, time management, nutrition, exercise, relaxation, positive self talk, stress inoculation, and cognitive restructuring. These techniques and skills forge long-term effects such as increased self-esteem, self-respect, and self-confidence. Other results are improved physical and mental health and resistance to illness and future stressors. The overall benefits are increased productivity, improved relationships and more satisfaction and enjoyment of life. This is wellness.

The other branch of Charlesworth and Nathan's (1984) model is the Distress Cycle. The same stressors that can lead to health can instead be the source of stress overloading in some people. Sometimes too many stressors occur at once, or else the individual makes unwise choices, like overeating and excessive alcohol consumption, that elevate the level of stress.

Physiologically, the individual responds with heightened muscle tension, elevated blood pressure and rapid heartbeat (GAS). Emotionally, anger and anxiety surface. Cognitively there is increased distractibility and decreased concentration. As a result, when these symptoms are not alleviated, there are serious consequences. Long term effects can be behavioral disorders (obesity, alcoholism), medical disorders (headaches, hypertension, heart disease, stroke), emotional disorders (chronic anxiety, phobias, depression, personality disorders, mental

illness), and cognitive dysfunction (memory problems, obsessive thoughts, sleep disorders). The overall costs of the Distress Cycle are decreases in productivity, intimacy and vitality. Stress that is not handled early on and appropriately leads to a diminishment of one's ability to fully enjoy all aspects of life.

Jim, the final individual who participated in this study, is in the Distress Cycle, while all the other subjects are in the Wellness Cycle.

Wellness

The two individuals who consider themselves to be only mildly stressed are Bob and Carol. Both are over forty years old, have very close and supportive families, own homes, and want to continue living where they do now. Both would prefer to continue working at Fort Devens if that option were available and probably would not have made any changes had BRAC not occurred. They are both supervisors and seem to be more concerned about the stress that others are undergoing than their own stress. While both seem to be weighing other options, they strongly prefer to remain in their community rather than relocate. They have roots. Carol has the safety net of being able to retire in two years under the provisions of a recently offered early retirement program as part of the BRAC outplacement program. Bob lives close enough to Boston and will probably find a job with another federal agency there. I do not

believe that either Bob or Carol will make any substantial changes to their lives as a result of the closure of Fort Devens or joining Fit to Win.

Bob and Carol seem to cope with stress by participating in family activities. Neither has intense hobbies or recreational pursuits. Both are somewhat careful about their diets, but they do readily admit that they eat foods that are high in fat. While Bob exercises to some degree trying to strengthen his body from a previous injury, Carol does not exercise regularly.

Neither Bob nor Carol joined Fit to Win because they felt they were particularly stressed. Rather, they joined because the program was available or someone had recommended it. In Carol's case, she wanted to lose weight. Bob wanted to take advantage of the opportunity to exercise during work hours. They both feel that Fit to Win has been a valuable experience, believe that they now possess the knowledge to live a healthy lifestyle, and realize it is up to them to continue on their own. Both also feel it would be extremely worthwhile to permit Fit to Win graduates to continue the exercise program during work hours, as do all of the other participants.

Bob and Carol have been exposed to all of the negative stimuli that accompany the closure of Fort Devens, such as uncertainty and increased workload, but they have remained relatively unscathed. They were stable and secure before they found out that they would lose their jobs, and remain

in that general state. They have demonstrated health-promoting lifestyle responses.

Bob and Carol use techniques and skills that are adaptive. Behavioral responses during this period of stress have been efficient time management, which balances work and family activities. Even though their jobs have become much more demanding, they spend quality time with their spouses and children. They talk over their circumstances and joint problem-solve with family members. They practice sound communication skills on and off the job.

Time management and social support appear to be the primary methods that Bob and Carol have utilized in order to maintain health and remain in the Wellness Cycle. While their overall physical, emotional, and mental health may not have improved, they are not in jeopardy of slipping into distress or ill health.

The next group of subjects considered themselves to be moderately stressed because of base closure. Tom is in his late 40s, while Alma and Mindy are in their 30s. All three feel stress at work because of the heavier work load, and all are very concerned about their futures. Tom, Alma, and Mindy express typical emotions associated with stress and grieving such as disappointment, sadness, anxiety, depression, and confusion about what to do next. They seem to feel quite threatened because the source of income they depended on will soon disappear.

All of them realize that they now need to make other career plans in order to become financially secure. Mindy does not feel that moving is an option for her at this time because her husband is a business partner with his brothers in the community. The extended family is very close. Alma is heartbroken because she thinks she will have to leave a safe community where she is raising her two small children. However, she is prepared to relocate and has identified another community which she and her husband believe will be a good place to live, and it is two hours closer to family in New York. Both Mindy and Alma are preparing for the future by enrolling in educational programs leading to Associate degrees that will prepare them for new careers.

Mindy and Alma joined Fit to Win because each were advised by doctors to exercise to relieve some stress. Fit to Win became available at a very opportune time for them both. They both are actively continuing to watch their diets and to exercise. Both have additional hobbies and interests. Alma is actively involved in community action organizations, and Mindy sews. Both are involved with their families and have indicated that their relationships with their husbands have improved during this period of crisis. Both joined Fit to Win because they needed it, and they consider Fit to Win to be a very valuable program.

Tom did not join Fit to Win to specifically alleviate stress, although he acknowledges high stress at work. He joined Fit to Win mainly because it was a sanctioned way of

getting more exercise. He knows he feels stress if he doesn't get enough exercise. He is also very concerned about maintaining good health, after having what may have been a mini-stroke a couple of years ago. He has many interests and hobbies, most of which relate to the outdoors, maintaining his home, traveling, and caring for elderly relatives. He is single, introverted, and focuses on solitary activities rather than social ones. However, he receives enormous pleasure from these pursuits, and his current lifestyle is very important and rewarding for him. Tom has serious commitments to his property and extended family, leading him to conclude that it would be very difficult for him to move.

However, Tom is also seriously considering his alternatives. He is well educated with a Master's degree, and although he does not require a large income, he does need good benefits, like health insurance and retirement. He is open to relocation but is somewhat reluctant. He seems torn between his almost secret desires for more adventure and his strong sense of duty towards his present commitments. He is beginning to take more actions to secure another job and is hopeful that he will be able to remain living where he is, even though a long commute to work may be the trade off. Tom is dedicated in his pursuit of exercise and is very careful about his diet. He gives the Fit to Win program the highest praise.

Tom, Alma, and Mindy all seem to be adjusting well to changes in their lives caused by BRAC. Alma, Mindy, and Tom have all been exposed to the stress of base closure. They are all aware of their heightened state of stress. That awareness has led each one to seek out ways to alleviate the distress he or she was feeling.

This group of people seems to have used a variety of adaptive coping techniques and skills. Like Bob and Carol, they employ the adaptive behavioral response of time management. Alma and Mindy are juggling responsibilities at home, work, school, and recreation. Tom has a demanding job and multiple chores and duties after work that keep his schedule full. Additionally, they have all embarked on adaptive physical responses such as focusing their attention on nutrition, exercise, and relaxation. They eat right, are devoted to exercise regimens, and relax with hobbies, fulfilling obligations in the home or to others, or spending quality time with family or quiet time alone. These activities have rejuvenated them and given them fuel to overcome the stressful circumstances that envelop them. Additionally, they are utilizing cognitive and emotional responses that are helping them to deal with changes. They use self talk and prayer to set their attitudes in a positive direction. Alma, Mindy, and Tom all display enthusiasm about what they are doing to handle the stress of base closure, and they have hopeful attitudes about the future.

Alma and Mindy, especially, have developed communication skills with their families that have strengthened bonds and support. This also enhances mental and emotional well-being for them. Tom is less connected socially, but he seems very comfortable with solitude, and he has extended family members who depend upon him. He has also found some social needs were filled by participating in Fit to Win. This group of people is adapting very well to change, coping effectively with stress, and has become firmly situated in the Wellness Cycle.

As a result of their personalities, personal habits, and level of social support, Bob, Carol, Tom, Alma, and Mindy are all reacting to stress in a positive manner. They are utilizing techniques and skills that are adaptive. All five are participating in the Wellness Cycle as described by Charlesworth and Nathan (1984). They are responding to stress with physical, behavioral, cognitive and emotional responses that are effective and promote long term wellness. Self esteem, physical and mental health are stable for these individuals. Despite the uncertainty and stress they are encountering, they are also benefiting with increased productivity, enjoyment, and intimacy.

Distress

On the other hand, Jim is not faring well in the process of base closure. He readily acknowledges that he is extremely stressed. Not only is he losing his job, but he

also has had recent deaths in his family, marital problems, financial difficulties, and work related predicaments. He describes himself as fat and a heavy smoker. Although he is in his mid-thirties, he looks older. All this considered, Jim was also the most fascinating, alive, and remarkable person that I interviewed. He has a commanding voice, intense opinions, and a passionate avocation in the theater. While he is definitely the one person in the study who is the most at risk to suffer some dire consequence from all of the stress he is subject to at this time, it is also clear that he is extraordinary, and if he could somehow use the impending changes to his advantage, then something outstanding could result. While he complains incessantly, his complaints never deteriorate into whining or despair. He expresses vivaciousness and charisma. Although he has no idea as to the next step for him, and readily acknowledges that many doors are closed, he is not defeated. He is in transition, and with a lucky break, I believe that he could excel.

Jim is a man in crisis at this moment. He joined Fit to Win because he thought it would help him make some lifestyle changes and cope with stress. Deaths in the family kept him from finishing the program. Fit to Win may have helped Jim to break out of the Distress Cycle if he had relinquished any of his unhealthy habits like smoking and overeating. Nonetheless, he says he would really like to give the class another try and highly commends it.

Somehow, Jim always seems to be willing to give life another try.

Jim does not seem to have tapped into any of the mechanisms available to mitigate the stressful situation embroiling him. His behavioral responses have been maladaptive. He is aggressive at work. He is extremely vocal about being discontent at work and sometimes sounds paranoid, as if there were a conspiracy to "get him" in some way. He does not manage his time effectively. He "burns the candle at both ends," overscheduling activities and leaving very little time for his family or himself personally to regenerate.

Jim does not use adaptive physical responses either. His nutrition is very poor and he doesn't exercise. He does not take the time to relax and recover from the stress he feels at work. Cognitively and emotionally, he is negative and agitated. He thinks he is fat, he smokes, and he knows his behavior is injurious. He is emotionally angry and anxious. He has failed to use any of the coping mechanisms available to him that could potentially redirect him from distress and ill health into wellness.

The Charlesworth and Nathan (1984) model applied to the six individuals studied shows that stress overload can have serious consequences, as in Jim's case. He has been exposed to multiple stresses and has not used adaptive responses. He has been undisciplined in his eating, sleeping, drinking, smoking, and social habits. Jim is

caught in a downward spiral that can only lead to more distress unless he makes the decision to put forth the effort to break the Distress Cycle.

In contrast, Bob and Carol have lived lives of moderation for a long time. They eat and drink in moderation. They have supportive relationships. They avoid stress overload and are coping satisfactorily with base closure.

The most interesting finding of this study is that two people (Alma and Mindy) who were in the midst of stress overload reversed the Distress Cycle and traversed into the Wellness Cycle. By making a conscious decision and following through with consistent and persistent action, these two women eliminated harmful patterns and developed and practiced adaptive responses. The Fit to Win program is the vehicle they used to achieve this dramatic change. Tom avoided the Distress Cycle by reinforcing healthy habits and developing new skills. The Fit to Win Program only covered exercise and nutrition, but was a critical element in promoting wellness for Alma, Mindy and Tom. It significantly improved the quality of their lives.

The Charlesworth and Nathan model (1984) is an effective tool in understanding how the range of choices one makes while under stress creates wellness or distress. The participants in this study demonstrate the impact of those choices.

Resilience

In trying to understand why Jim continues on with exuberance in the face of adversity, I considered that Jim seems to be resilient, although he does not exactly fit the model. Shaffer's (1982) "resilient" or "hardy" model is characterized by individuals taking personal responsibility for their fate and accepting the consequences of their actions. Their self esteem is high and they strive to improve. They have an optimistic viewpoint and expect life's events to turn out favorably.

At this point, Jim does not appear strong in any of the above areas. While he is to a degree the victim of uncontrollable events, he is not taking full responsibility for his fate or accepting the consequences of his actions. He is stuck in the Distress Cycle with negative thinking and deleterious behavior. He smokes, drinks, stays out late, argues with his wife and bosses, and generally engages in an unhealthy lifestyle. His self esteem oscillates from being very poor in the area where he feels he is a failure (at work), to arrogance where he feels he is a great success (the theater). He does not appear to be particularly optimistic or hopeful about the future, but he does display the "optimistic" characteristic of blaming others for misfortune rather than himself as described by Seligman (1991).

Jim does at first appear to fit the resilient model in several key areas. Jim embraces life. He is deeply,

intensely and emotionally immersed in daily events. He operates in an "open learning mode," which features creativity and divergent thinking. Originally, I speculated that these characteristics have probably kept him from burning out so far and could catapult him out of his current crisis and into success in the future. However, upon deeper analysis of the situation, I have reevaluated my position. I realize that Jim's refusal to take responsibility for his actions cancel out the possibility that he is resilient in the terms Schaffer (1984) describes. Rather, Jim manifests compulsive and injurious behaviors that more likely express the thrill of living on the edge of disaster. His emotions seem to range wildly from euphoria to depression, grandiosity to despair, arrogance to helplessness, fury to morbidity. There is no sense of moderation, self-discipline, or personal responsibility. He is on a roller coaster that hasn't yet careened off its tracks, but it is inevitable, given the momentum and direction it is headed.

I believe that there is a less dramatic script that plays out in the lives of resilient people. When I reviewed the criteria for resilience (listed in chapter two), I realized that Alma, Mindy, and Tom fit into this model. They have made firm commitments to living healthy and satisfying lives. They have set goals for improvement of their health, and they follow up with actions that reinforce their commitment and goals like education and job

hunting. They have positive attitudes about themselves and their outlooks for the future. They have taken control over those aspects of their lives that they can control, like exercising and eating right. They are keeping their minds open about options regarding their careers and where they will live geographically. They are learning and growing from the experience of base closure. They are problem solvers. These subjects are actively participating in determining what happens to them.

Not only have they not accepted victim's roles, Alma, Mindy, and Tom have taken command of their destinies. They have taken full responsibility for living pleasurable, industrious, meaningful lives. These three people have demonstrated how to weather difficulties with flexibility, determination and innovation. The outcome of resilience is that they are thriving, while others are striving to maintain homeostasis, and still others are merely surviving. They have been mobilized by the discomfort of stress into making changes that have improved themselves and the quality of their lives substantially. They have transformed the negativity of stress into the positive energy of eustress.

Spirituality

Eustress may be linked to the concept of spirituality which implies that life has meaning beyond the individual human drama. Detert and Schindler (1990) refer to this idea

as knowing that the spirit is that dimension of humanity that acknowledges and profits from interaction with something greater than oneself. This can be community, nature, mankind, principles, or God. Each of the three people who successfully coped with change indicated that they practice spirituality in some way. Alma said that her faith helps her get through difficult times and that daily praying gives her "spiritual lifting." It makes her feel calmer. Mindy reads self-improvement and inspirational books which have helped her with self-acceptance and self-esteem. She feels centered and peaceful through her reading. She also attends church regularly. Tom is considering taking a class on meditation which he heard "helps people feel good." He is a devoted church-attende, prays for guidance, and feels he gets much strength from his religion. These three people are apparently gaining motivation from their spirituality to have positive outlooks on life and take the actions necessary to reach the outcomes they envision. It is possible that spiritual practices and convictions are helping them to see beyond the immediate circumstances and cope with the uncertainties in their lives in an uplifting way.

Bob also enjoys reading positive-thinking books but wonders, "Am I really just keeping myself busy and not actually doing what I need to do to be employed?" Within these words are clues to the difference between Bob, and Alma, Mindy and Tom. First, Bob acknowledges that he is

involved in a mental process of preparation but is not following up with constructive behavior. Alma, Mindy and Tom have all aggressively pursued healthy habits. Second, Bob is focusing on employment as the main issue at hand. Alma, Mindy and Tom have broadened their perspectives. They are not just interested in their employment situation. They are dedicated to improving their lives holistically.

Spirituality is an important stress management technique that Detert and Schindler (1990) have included as part of their comprehensive education program. It seems to have been a decisive force with the group that has successfully coped with stress.

Control and Change

While spirituality may supply the mental and emotional fuel for change, it is behavior that produces results. Another difference between Alma, Mindy and Tom and the other people studied is that they took action on their own behalf. They took definitive steps to create improved lifestyles. They disciplined their own mental, physical, emotional, and spiritual selves. In this way, they took control of their lives and changed them.

The literature on stress clearly indicates that an individual's perception of the amount of control one possesses under stressful conditions is a very important determinant in illness or health. While losing their jobs at Fort Devens was threatening for all concerned, some

individuals, like Alma, Mindy and Tom, employed resources such as Fit to Win to control their response to the threat and make the most out of it. They controlled their habits, their attitudes and their destinies more than their cohorts. This reinforces the mind-body connection theory. Controlling thoughts to produce positive emotions leads to constructive behavior and results in wellness. Mastering change requires seizing control of one's own life. It is an exercise in self-love. Education can inform an individual about which knowledge and skills will facilitate the journey toward self-love and growth.

Stress Management Components

Detert and Schindler (1990) lay out a comprehensive framework for an ideal stress management education program as described in Table 2. Although Bob and Carol exercised and improved their nutrition while engaged in the Fit to Win program, they did not make them permanent habits, so they never became changes in lifestyle. Their lives are characterized by self-discipline and moderation. They are reaping the benefits now of being responsible to themselves, their families and their jobs. Other than time management and a stable support network, they are not utilizing any of the other stress management techniques recommended by Detert and Schindler.

Jim does not seem to be employing any of the 27 components of effective stress management education

discussed by Detert and Schindler (1990). While his acting provides a creative outlet for him which elevates his self-esteem and regenerates his spirit, the time he devotes to it is detracting from overall effectiveness in other parts of his life, like family and his job. Creativity is not listed as a component, but acting could probably be included in the play compartment. However, acting may not be play for Jim. He imposes pressure upon himself in this area also, and it is beginning to lose its previous properties of enjoyment and revitalization.

In contrast to Bob, Carol and Jim, the moderately stressed group composed of Alma, Mindy and Tom is using many of the components of effective stress management education researched by Detert and Schindler (1990). In addition to their aggressive pursuit of physical fitness through exercise and nutrition, these subjects are involved in hobbies or interests that help them to relax and play. Spirituality is important to them. They are improving their time management, communication and decision making skills. They have strengthened their social support with their families. They have vastly enhanced their self-awareness about their bodies, how they react to stress, and how it feels to be healthy. They have each made a commitment to self-improvement and self-realization. They want more out of life and intend to do whatever it takes to achieve their objectives. Finally, they have internal loci of control. They have taken responsibility for their lives and are

holding themselves fully accountable for their behavior. They have evoked mental, emotional, and physical states that promote well-being. It appears that using a variety of stress management techniques is the best method for combating stress. It probably diffuses the nonspecific symptoms of stress and broadly addresses the needs of the individual who must be balanced physically, mentally, emotionally, socially, and spiritually.

Personal Growth

The subjects interviewed seem to fit into three categories. Bob and Carol are mature and strong in their values and in their emotional and mental stability. They have deep roots that are evident in their support from and to their families and commitment to the communities where they live. They are staying where they are and will not be changed very much by base closure or by other external events. While they bend with the seasons, they will not break. Each one demonstrates concern and helpfulness towards their subordinate employees under their protection.

The second group consists of Alma, Mindy, and Tom. They are more fragile and transportable. They have roots, but they are also movable. While none of them wants to change jobs or move from the communities where they now live, they will adjust to external demands for change. They will do whatever is necessary to support their families or themselves. Both Alma and Mindy are in educational programs

that will retrain them for new careers. Tom already has a terminal graduate degree and intends to remain in the counseling field. However, he is open to the possibility of having to move in order to retain employment with the federal government. While none of them wants to relocate, both Alma and Tom are exploring this as an option. Mindy previously considered relocating to advance her career when her husband was unemployed, but now she does not consider it to be a viable alternative. However, my impression is that if the business partnership with her husband's brothers declines, she would consider the prospect of moving. These people are willing to readjust their expectations and belief systems about themselves and their careers. Their willingness to grow is like a blossoming plant. They are developing in ways that are healthy and hold the promise of success.

Jim is the lone inhabitant of the last category. Jim is being tossed around ruthlessly by the winds of fate. He is suffering multi-dimensional crises concurrently. Some of his quandaries are out of his control; however, he is actively contributing to his distress by some of his unwise choices and lifestyle patterns. He expresses an independent spirit and penchant for challenges. While Jim is currently drifting and twisting due to external events, he also has the potential to be transformed by these crises. He is intelligent, talented, and persevering. He is creative and possesses a genuine zeal for living life to its fullest.

Jim embodies the seeds of hope and prospect of rebirth that can result from the unexpected and unsolicited changes of life.

These six individuals have experienced the stress of base closure in different ways. As we learned from their interviews, each one has unique circumstances, values, and personality traits. Therefore, each one is coping with the uncertainty of losing his or her job in his or her own style. Bob and Carol are alike in that they are stable and will adjust to changes without making major decisions or going through dramatic upheaval. They have strength and steadfastness. On the other hand, through the turmoil of base closure, Alma, Mindy, and Tom are adapting in ways that were unexpected and require major changes in attitudes and beliefs. They are improvising and finding novel ways of making the best of their situations, blooming with personal growth. I believe that, in retrospect, these three people will see the closure of Fort Devens as a positive event in each of their lives. In contrast to the first two groups, Jim symbolizes the possible demise and potential resurrection that exist in the throes of adversity. He seems to now have equal capacity for self-destruction or transformation. The future will unfold his fate as it will for the others.

We have seen how six people have been exposed to the same event, and how each one has reacted as an individual in most aspects, yet each one has also displayed patterns

that can be classified into three categories of response to base closure. In the next chapter, I will discuss the effects of Fit to Win on these people.

CHAPTER 5

FINDINGS

In the previous chapters I have described Fort Devens and the base closure process, explained the goals and procedures of the Fit to Win program, and discussed the nature of stress and techniques for managing stress. I have also introduced six employees at Fort Devens so that they could reveal the stress of base closure through their personal stories. Additionally, we have heard their views on the Fit to Win program. We have seen that each person comes to crises with different strengths and concerns. Now we shall explore the question of whether the Fit to Win program has been utilized as an effective tool in helping individuals to deal with the stress of base closure.

Lifestyle Management

The Fit to Win program is promoted as a lifestyle management program. Its purpose is to motivate and improve individual lifestyle behaviors. Key objectives of the program are to increase awareness about healthy lifestyles, provide individual assessment to identify needed interventions, and target interventions to promote and sustain healthy lifestyles. Education is provided in physical conditioning, nutrition, and weight control, while referrals are made to other areas where intervention is warranted, for example, smoking cessation. The Fit to Win

program is intended to be an informative and enjoyable way of acquiring healthy lifestyles for the goal of overall improved fitness and health.

While this program is available at all Army installations, it was offered at Fort Devens at a critical period. The program was initiated simultaneously, though coincidentally, with the decision by the government to close Fort Devens. Therefore, all of the Fit to Win participants were undergoing the stress of base closure while participating in Fit to Win. This led to the inquiry if Fit to Win might be an effective stress management program.

All of the subjects expressed the view that Fit to Win is a worthwhile project, enjoyed their involvement in it, and wished that they could continue participating in it after graduation from the program. Even Jim, who did not complete the program due to circumstances outside of his control, held this attitude towards Fit to Win.

While all held the program in high regard, not everyone utilized it in the same manner, nor gleaned the same results. Bob and Carol joined Fit to Win and were pleased with the results. However, their behaviors changed only temporarily. They loyally adhered to the program while they were attending it. But afterwards they resumed their habits of being sedentary and eating "junk food." They learned about healthy lifestyles and practiced them while in a structured environment, but largely abandoned them

when left to their own accord. While they are now equipped with the education to change their lifestyles, Bob and Carol have chosen not to do so. They did not join Fit to Win because of stress, and they do not feel especially stressed now. They began in the Wellness Cycle and remain there. Fit to Win has not been an effective stress management tool for either of these two subjects.

Alma, Mindy, and Tom all joined the Fit to Win program, actively engaged in it, and continue to practice its main principles of regular exercise and balanced nutrition. It appears that Alma and Mindy each sought out Fit to Win as a mechanism for stress or crisis management rather than lifestyle management. They were both experiencing psychological, physical, and emotional symptoms of stress. They turned to Fit to Win as a method of obtaining relief from their discomfort. While they initially used Fit to Win as a strategy for stress management, both Alma and Mindy successfully have integrated the teachings into their daily lives. Fit to Win has been a very effective tool for helping these two women move from the Distress Cycle into the Wellness Cycle. Alma and Mindy have made significant lifestyle changes, and Fit to Win was instrumental in providing the knowledge and climate that they needed in order to imprint those healthy lifestyle changes permanently. Fit to Win helped them to deal effectively with the stress of base closure.

Tom apparently joined the Fit to Win program because he knew that Fit to Win would help him get through a period of time when he needed the benefits of the program and had no other mechanism for doing so. Tom seems to be acutely aware of his own physiological well-being, and sought a means of getting the exercise he knew he needed during winter in New England because of the inclement weather. I believe that Tom may have intuitively known that Fit to Win would keep him from slipping into the Distress Cycle in the wintertime and while pressure at work mounted because of base closure. Fit to Win reinforced healthy lifestyle patterns that Tom already practiced. It also enriched his life by providing a social outlet and concrete knowledge about nutrition, in addition to introducing him to new exercises and equipment. Tom gave the program its greatest accolades. I believe that Fit to Win was an effective stress management tool for him. Tom chooses to live a healthy lifestyle, and I believe he will continue to make those choices that support wellness and countermand stress.

Fit to Win was not an effective lifestyle or stress management vehicle for Jim. While he might have utilized the program for stress management and for healthy lifestyle management in a fashion similar to Alma and Mindy, he did not. Instead, he has been deeply immersed in the Distress Cycle and remains there. Jim is consciously and repetitively choosing behaviors that defy wellness and

exacerbate distress. Fit to Win had neither a positive nor negative impact on Jim.

Positive Effects

In order to better understand the positive effects of Fit to Win, let us examine Alma, Mindy, and Tom in more depth. As I stated earlier, they were willing to change and grow. In the face of adversity, each has made choices that promote a healthy lifestyle. In addition to expending the necessary time and effort to exercise and monitor their nutrition, they are actively seeking satisfying employment elsewhere or retraining for a new career. They are engaging in activities that are fulfilling in their personal and professional lives. They are looking beyond Fort Devens to their futures. Alma, Mindy, and Tom are each taking action to control their destinies and encountering change by adapting, creating, challenging, asserting, mastering, and managing themselves and their resources. They have invested in themselves and are reaping the rewards of healthy and happy lives. Their choices have generated more options and broader horizons. They have invested in themselves and their futures, and this is a winning formula.

In contrast, Bob and Carol are comfortable with the status quo. They are content to conserve their energies and resources. They have both elected to continue to contribute to Fort Devens in moderation, but do not have a vision that transcends base closure. They have consciously chosen not

to exert control over their futures at this point. Therefore, they are responding, adjusting, coping, reacting, aligning, and accepting the changes as they occur in their lives. They are not changing themselves. However they are in the process of limiting the impact of external events on their personal and professional lives. They are budgeting how much they will give to Fort Devens in exchange for what they get from it and are hoping for equilibrium. The outcome of their choices has been the narrowing of their field of options, but they still retain some of their abilities to control their own fates. They have budgeted their present circumstances and their futures, and will probably break even.

In the midst of turmoil, Jim stands alone. He disregards health and safety and courts distress. He has chosen to resist, reject, oppose, confront and combat both the changes and the people associated with the changes. His aggressiveness has resulted in destruction and dysfunction. His choices have lead to high risk, dangerous consequences for himself and his family members. He needs more than stress management at this point. He needs crisis management. He is gambling with his future, and the odds are that he will lose.

Stress management techniques are tools that we can use to promote adaptation. Actually, stress management techniques are methods of regaining control over circumstances. An individual chooses whether or not to

their resources and expect to get more than they give. They slip into an abyss of diminishing returns. In contrast, investors generously give and take. They generate a fund of attitudes and activities that becomes self-sustaining and continuously produces dividends of health, happiness and prosperity.

Education for Wellness

The purpose of stress management education is two-fold. First, it should help people to adapt, cope, regain homeostasis, and adjust successfully to demands in the environment. At its best, it should assist one to master change. By reframing change as a new venture, a person can look forward to challenges with optimism and confidence. Second, stress management education should teach people how to deal with the stress of life without feeling overwhelmed. People can learn how to successfully reverse harmful behavior and negative emotions. They must use the skills presented in class in order to replace frustration, anger, tension, and depression with adaptive responses. They must make personal choices to substitute wellness in place of fatigue, burn-out, and exhaustion. Learning and applying the lessons of stress management can diminish stress and create wellness.

Fit to Win was not only a lifestyle management or wellness program, it was stress management education. It focused on the physical components of stress management

exclusively. However, it included the two most important aspects of any stress management program: exercise and nutrition. It is understandable and suitable that a stress management program sponsored by an employer would concentrate on the physical facets of wellness while circumventing the emotional, mental, and spiritual dimensions. In accordance with Charlesworth and Nathan's model of Wellness (Figure 4), a complete stress management program would supplement the adaptive physical responses with adaptive behavioral, cognitive, and emotional responses. For holistic health, these components cannot be separated. However, for the purposes of employment, the emphasis on physical wellness suffices to reduce stress to some degree. It is appropriate for organizations to consider mental, emotional, and spiritual issues to be private concerns of their workers to be handled on their own time.

I believe that part of the phenomenon observable in this case is directly related to the mind-body connection. The focus on the physical components of exercise and nutrition in Fit to Win produced a "body-mind" chain reaction. As the active Fit to Win participants learned about and took action to improve their physical conditioning, their mental, emotional, and spiritual health corresponded. They shifted from distress to eustress and wellness.

If "knowledge is power," then Fit to Win empowered some of its students to change. As an educational tool, Fit to Win demonstrated its ability to be an agent of change. In this case, the Fit to Win class proved to be a catalyst for personal growth for three people, Alma, Mindy, and Tom.

"You can learn to manage your stress and enhance your wellness by changing your responses to modern society."

(Charlesworth & Nathan, 1980, p. 17). Education can be an effective means of attaining wellness. A truly worthwhile stress management education program goes beyond simply coping with stress and has the goal of wellness. Fit to Win succeeded in promoting the wellness of the students who attended and fully participated in the course.

Human Resources Implications

Stress management education in the form of a lifestyle management (wellness) program has the potential to reduce employee dissatisfaction and elevate employee well-being. In the human resources field, there are numerous indicators of employee dissatisfaction. Some of those indicators are turnover rates, tardiness, absenteeism, accident reports, transfers, re-assignments, disciplinary actions, terminations, strikes, lawsuits, work force violence, workers compensation claims, disability, retirements, suicides, and customer complaints. These are all employee initiated actions that can severely impact the profitability and viability of an organization.

In contrast, the common indicators in the human resources field for employee satisfaction and well-being are increased productivity, improved performance, high morale, teamwork, lower health care costs, higher motivation to excel, cooperation, harmony, pride, and a sense of individual contribution or making a difference to the organization. Performance appraisals, awards, training, and support services are ways that the organization can reinforce a work climate that promotes employee well-being and satisfaction.

An educational program designed to cope with stress through lifestyle management promotes wellness, health, and fitness. A pro-active organization like Fort Devens may have avoided many of the negative human resources consequences by offering Fit to Win at a critical time. Under normal circumstances, it may have helped even more people to gain fitness and feel well. However, we do know that it helped some people at Fort Devens to get through very difficult times. We know that Alma, Mindy, and Tom all benefited to a great degree by participating in Fit to Win.

In this particular case, I believe that the evidence shows that the organization, Fort Devens, invested in its employees by providing a course in lifestyle management. The outcome was that some employees took full advantage of the program by investing in themselves. They felt enriched by the experience. Their increased health and vitality was value added to the organization, and also may have

circumvented some of the pitfalls of stress overload that could have severely affected the organization. The Fit to Win program was a "win-win" proposition. It followed the premise of The Hippocratic Oath: "First, do no harm." It did not hurt any of the participants, it helped some of them to a moderate degree, and it changed the lives of a few of them. This study seems to show that stress management programs are a good investment for organizations and individuals alike.

Conclusions

This study has examined the lives of six people who are all losing their jobs. We have attempted to determine whether Fit to Win has been perceived and/or used as an effective tool in managing stress for these workers. The conclusions are as follows:

1. Fit to Win is perceived as an effective lifestyle management program.
2. Fit to Win has a varied impact on participants: temporary, permanent, and no change.
3. Fit to Win has been used as an effective tool in managing stress for some workers.
4. Fit to Win can be used as a vehicle for successful transition from stress management to lifestyle management or wellness.

Fit to Win is perceived as an effective lifestyle management program. All of the participants thought the

content was sound and the results were worthwhile. Everyone evaluated it as an excellent program and admitted that if they had followed its prescriptions, they would have benefited from it. While everyone recognized its value, not everyone adhered to its formula. Those individuals (Alma, Mindy, and Tom) who fully engaged in the program theoretically and in application, reaped the greatest rewards. They now exercise frequently and regulate their diets. They have integrated these major changes into their lives. The outcome is that each one is now very competently managing his or her lifestyle, and each one has significantly enhanced his or her sense of well-being and health.

Second, Fit to Win has a varied impact on participants. Some people, like Bob and Carol, derived benefits from the program while actively participating in it. They enjoyed it, they exercised and dieted during the eight-week program, but afterwards did not persist in practicing what they had learned. They freely acknowledge that they have the knowledge they need to live a healthier lifestyle, but they choose not to follow through with the required activities on a daily basis. Other individuals, like Alma, Mindy, and Tom, appear to have achieved permanent changes. Alma and Mindy were ready to integrate major lifestyle changes into their routines because they were undergoing moderate amounts of stress and experiencing health problems. This motivated them to seek a program that

would provide them with information and skills that could help them. They wanted to change, and they did. Tom apparently was already following most of the tenets of Fit to Win; however, being a loner, he was able to find social reinforcement from participating in the program that his practices were sensible. Alma, Mindy, and Tom dislike the negative consequences of not exercising and of poor nutrition so much that they faithfully practice what they learned in Fit to Win. Some people, however, will not be changed by Fit to Win. Jim never finished the program, but he is not willing to change at this time either. Some people are evidently not in an open frame of mind or determined to put forth the effort needed to make the program work for them.

Third, Fit to Win can effectively help individuals to cope with stress. All of the participants were undergoing the stress of impending job loss, and many had compounded problems that they were dealing with during that period of time. In particular, Alma, Mindy, and Tom connected with Fit to Win in order to alleviate symptoms of stress. By adhering to the program, they successfully coped with the stress they were encountering and received the benefits of eliminating distressful symptoms that were causing them discomfort and concern. Other benefits have been an improved overall sense of wellness and the ability to resolve problems and look forward to the future with hope. Bob, Carol, and Jim have not achieved these results. Bob

and Carol are coping with mild stress, and things will most likely work out well for them. However, Bob and Carol do not have the vitality and optimism that Alma, Mindy, and Tom possess. Alma, Mindy, and Tom have mastered skills that have assisted them in overcoming the stress of base closure and its concomitant problems. Jim, on the other hand, is not coping with efficacy. While Fit to Win could have been a strategy for obviating stress, he did not take that opportunity. The result is that Jim experiences protracted and elevated levels of stress. He seems to be in a constant state of crisis. In summary, those who followed the program have very effectively managed stress, while those who did not have coped with stress in accordance with how well their other resources have buttressed them.

Fourth, Fit to Win can be a vehicle for successful transition from stress management to lifestyle management, or improved wellness. Alma and Mindy were both in a state of stress when they joined Fit to Win. In addition to impending job loss, their health and relationships were deteriorating. They joined Fit to Win as a possible solution for coping with adversity. Both submerged themselves in the Fit to Win program to the extent that it provided a conduit from a state of stress to effective lifestyle management. Both are now enjoying increased self esteem, health, well-being, and more satisfying relationships. They have fused exercise and good nutrition into their daily lives, which have been significantly

improved. On the other hand, Jim, who did not assimilate these modifications, perpetuates deleterious behaviors like smoking and overeating and remains in a state of unrelenting stress. I believe that if he had disciplined himself and conformed to the Fit to Win principles, he, too, could have emerged from stress to effective lifestyle management. Instead, he is in a state of crisis, and the prognosis is negative.

The most important implication of this study in an educational context is that stress management must treat the whole person. Programs like Fit to Win that address instrumental skill development like regular exercise and sound nutrition are helpful and can serve as a catalyst for adaptation on a larger scale. But for a program to transcend simple lifestyle management and to master stress, people must learn how to mend and nourish their minds, hearts, bodies, and spirits. These holistic methods can be taught with programs that introduce multi-faceted concepts such as the Charlesworth and Nathan (1984) Wellness and Distress Cycles and the multiple skills involved in the comprehensive stress management curriculum of Detert and Schindler (1990). These educational programs offer a wide array of methods that can be implemented for maximum effectiveness in coping with the countless daily irritants, and the less frequent but more formidable life events, that shake us deep down to our souls. Education raises questions

about our basic beliefs about ourselves and our world and forces us to seek solutions.

In order to move into a fourth generation worksite health promotion program, Fit to Win would need to be expanded to treat the whole person with a variety of interventions. I would recommend supplementing the health risk assessment, exercise and nutrition with a curriculum that includes stress management prevention techniques that are designed to meet some of the mental, emotional, and spiritual needs of the participants. The Wilson (1996) study lists six interventions that are effective: progressive relaxation, meditation, biofeedback, and cognitive-behavioral skills. This would be a good place to start bolstering the program. Also, Fit to Win as a fourth generation wellness program would need to include the employees and their families, communities, and customers. Outreaching the corporate wellness program to the circumference of those the institution influences is an ambitious theoretical model, and also an ideal to strive towards. Well employees in well communities make well organizations that can function at peak performance.

We do not know whether the return on investment was worthwhile for Fort Devens, but this has implications for further study. It would be interesting and useful to tie the major human resource indicators mentioned above for both well-being and dissatisfaction to see whether a lifestyle management program or stress management education

could significantly correlate. This would be of particular importance to organizations that may question whether they will be repaid for their efforts to provide support services to employees. While there is a commonly held belief that there is a direct relationship between employee health and performance, productivity and profit measures; I know of no research that proves or disproves this assumption. This research would probably be designed to be quantitative in nature.

Recommended future studies may prove worthwhile in the following areas. It would be interesting to track Alma, Mindy, and Tom to see how long they sustain their positive lifestyles and to find out if they gain employment that provides an income and satisfaction level equal to or surpassing that which they held at Fort Devens. Another useful research project would be to follow up on Jim. It would be worth knowing if he ever breaks out of the Distress Cycle and, if so, how he does it. It would also be worth knowing what the ultimate consequences will be of his unhealthy choices if he continues along his current pathway. Furthermore, it would be interesting to conduct a study that goes further into people's spiritual practices to determine if there is a correlation between spirituality and coping with stressful situations.

In March of 1995, another long list of defense installations was named to be closed in the final round of business for the base closure commission. Two hundred

thousand more federal employees will be impacted by base closure and downsizing initiatives from 1995 to 2002. I believe that the results of this study could provide valuable and useful information for these agencies. The Fit to Win program would be a service that could be offered to all civil servants faced with impending job loss. While only some participants will be positively and permanently changed by the program, any and all employees have the potential to benefit. Furthermore, it is a program that builds goodwill between the employer and employee, regardless of other benefits. Beyond the federal government, Fit to Win would be effective as part of any occupational health program at work or community health program that individuals could attend after work. Lifestyle management, albeit wellness, is a worthy goal for any individual at any point in life. When an employer supports healthy lifestyle management, the organization, in addition to the individual, benefits with greater productivity, trust and goodwill.

In summary, we have become familiar with Fort Devens, the base closure process, and a lifestyle management program called Fit to Win. We have been informed about the nature of stress and how to manage it. We have also entered into the private lives of six employees at Fort Devens who suffered job loss due to base closure. We have discovered that some people are minimally affected by base closure or Fit to Win. They adjust to changes and also learn how to

budget their resources and generally maintain homeostasis no matter what happens. They do not really win or lose, but they do balance accounts payable with those received. Other individuals are positively and permanently affected by base closure and Fit to Win. They adapt to changes. They invest in themselves educationally, physically, emotionally, intellectually, spiritually, and socially. They reach out to embrace a future that holds the promise of prosperity, success and happiness. These are the true winners in this study, and I believe that they win in the "game of life." They are "fit to win." Last, we have a small portion of people who are negatively affected by base closure and are untouched by Fit to Win. These individuals may defy growth or may hold the seeds of new growth but are presently dormant. Positive growth or negative decline and further dysfunction are equally possible. Persons in this class gamble with their health and their futures. If they continue in the Distress Cycle, more losses are predictable.

We have also found that Fit to Win is perceived as an effective lifestyle management program, although it has a varied impact on participants. Some people reap short term benefits, while others benefit for the long term. Some individuals, however, are not affected by the Fit to Win experience. Fit to Win can be an effective tool for managing stress. Furthermore, Fit to Win can be a vehicle

for successful transition from the rigors of stress management towards lifestyle management or wellness.

Choice is the key component in each of these themes. Some people have chosen not to change and now must cope with the consequences. Some people have chosen to control and master their fates. Other people have lost control both of circumstances and of themselves. They must suffer the results and are constantly doing damage control. This downward spiral can only be broken by making choices that neutralize the Distress Cycle and plant, cultivate, and harvest wellness thoughts, feelings, and behaviors. Frankl (1984) believes that we can learn from situations that are outside of our control and grow from those experiences.

Most important, however, is the third avenue to meaning in life: even the helpless victim of a hopeless situation, facing a fate he cannot change, may rise above himself, may grow beyond himself, and by doing so, change himself. He may turn a personal tragedy into a triumph. (Frankl, 1984, p. 147)

In other words, we all have the opportunity to realize more of our potential, even during times of adversity. The employees of Fort Devens were confronted with a difficult situation when they were informed that the base would close and they would all lose their jobs. Some of the people who participated in this study met that challenge by using an educational program to promote wellness. Those individuals not only survived, but flourished. Once again, the sage words of Victor Frankl are proven to be true.

APPENDIX A

BASES RECOMMENDED FOR CLOSURE

Department of the Army

Fort Devens, MA
Fort Benjamin Harrison, IN
Fort Ord, CA
Sacramento Army Depot, CA
Harry Diamond Lab Woodbridge Research Facility, VA

Department of the Navy

Construction Battalion Center, Davisville, RI
Hunters Point Annex to Naval Station Treasure Island,
CA
Marine Corps Air Station Tustin, CA
Naval Air Station Chase Field, TX
Naval Air Station Moffett Field, CA
Naval Station Long Beach, CA
Naval Station Philadelphia, PA
Naval Station Puget Sound, Sand Point, WA
Philadelphia Naval Shipyard, PA
7 RDT&E Engineering and Fleet Support Activities

Department of the Air Force

Bergstrom Air Force Base, TX
Carswell Air Force Base, TX
Castle Air Force Base, CA
Eaker Air Force Base, AR
England Air Force Base, LA
Grissom Air Force Base, IN
Loring Air Force Base, ME
Lowry Air Force Base, CO
Myrtle Beach Air Force Base, SC
Richards-Gebaur Air Reserve Station, MO
Rickenbacker Air Guard Base, OH
Williams Air Force Base, AZ
Wurtsmith Air force Base, MI

APPENDIX B
BASES RECOMMENDED FOR REALIGNMENT

Department of the Army

Army Corps of Engineers
Aviation Systems Command/Troop Support Command, St.
Louis, MO
Fort Chaffee, AR
Fort Dix, NJ
Fort Polk, LA
Letterkenny Army Depot, PA
Rock Island Arsenal, IL
10 RDT&E Laboratories
7 Medical Laboratories

Department of the Navy

Midway Island Naval Air Facility
17 RDT&E Engineering and Fleet Support Activities

Department of the Air Force

Beale Air Force Base, CA
Goodfellow Air Force Base, TX
MacDill Air Force Base, FL
March Air Force Base, CA
Mather Air Force Base, CA
Mountain Home Air Force Base, ID

APPENDIX C
FIT TO WIN HEALTH RISK APPRAISAL

THE HEALTH PROMOTION PROGRAM

Fit to Win

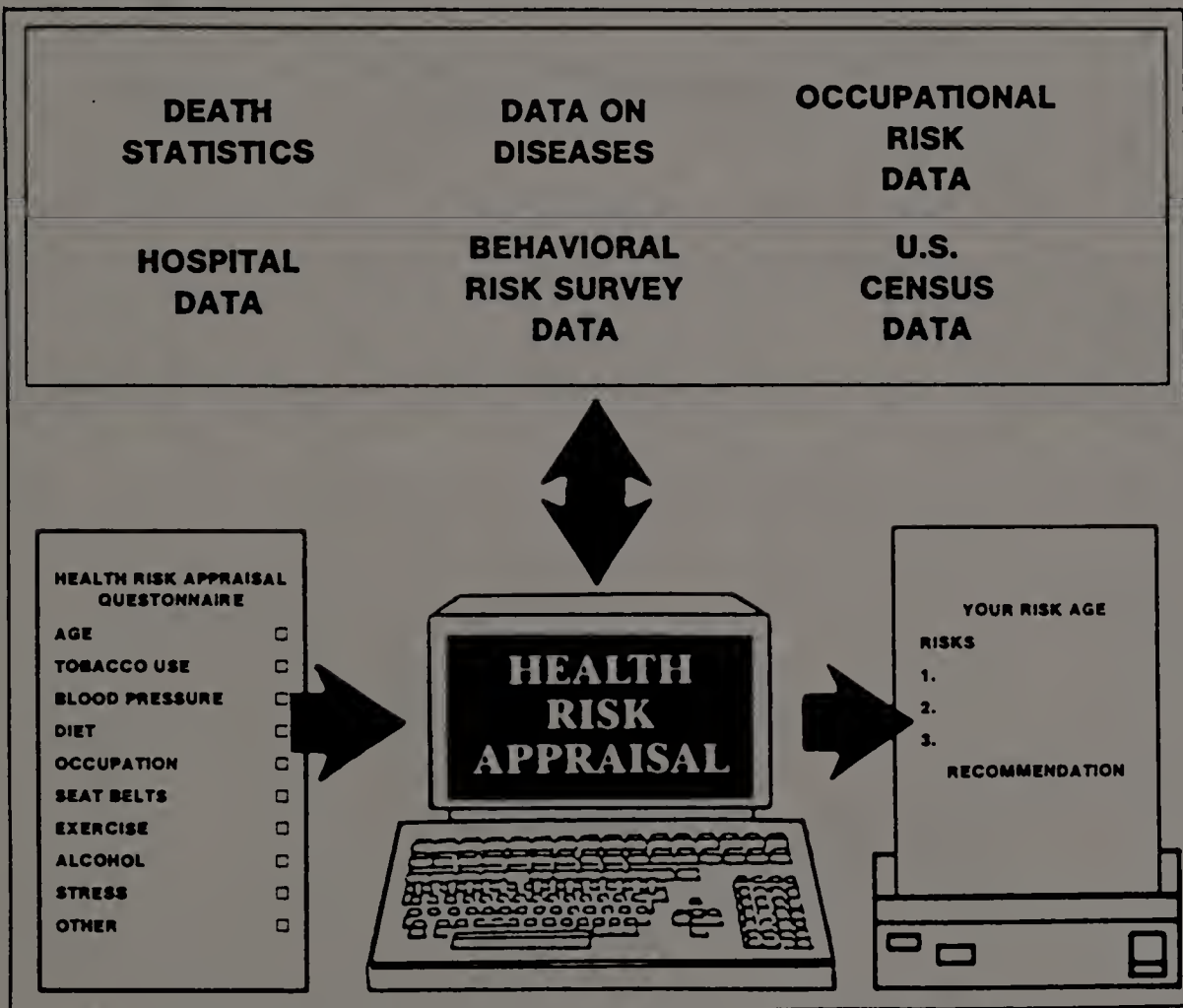
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HEALTH RISK APPRAISAL



For use of this form, see AR40-501 and AR600-63; the proponent agency is TSG

DA Form 5675, 1 Feb 92 (Edition of Oct 90 is obsolete)

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The HEALTH RISK APPRAISAL is an activity of
THE HEALTH PROMOTION PROGRAM

How does the Health Risk Appraisal work?

The health risk appraisal is a personalized estimation of your risks of death and major illness in the next ten years. First, the program uses your age and health-related personal habits, as well as national statistics on risk factors and diseases, to calculate your current risks.

Your risk may be expressed in terms of RISK AGE or HEALTH SCORE. Ideally, you want a risk age lower than your real age or a health score of 100 points.

The second part of your health risk appraisal calculates your risks again, as if your risk factors were reduced as much as possible. The result is your "target" risk age or health score. It shows your potential benefit, in health terms, of improving your lifestyle-if you quit smoking, wear safety belts, take moderate exercise, etc.

Therefore, your health risk appraisal report includes your real age, your current risk age and your target risk age. Your current risk age tells you how healthy your lifestyle is right now, and your target risk age lets you know how much longer and healthier you can live with a few positive changes in your lifestyle.

PLEASE ANSWER QUESTIONS AS HONESTLY AND AS CORRECTLY AS YOU CAN. This will allow you to receive the most accurate assessment of your health.

The results of the Health Risk Appraisal are for you. We ask that you give us your name so we can return your results and any recommendations for follow-up care to you. We also ask for your social security number so we can statistically track trends in health awareness over long periods of time. Statistical information may be collected from an wide database which will contain your information, but your name and social security number will be covered and cannot be read. The rules of the Privacy Act apply to any information that you give in the Health Risk Appraisal.

IMPORTANT NOTE! The health risk appraisal is no substitute for a physical examination or check-up. It will not give you a diagnosis nor will it tell you how long you will actually live. However, the health risk appraisal will help you understand and recognize your risk factors.

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 220. 2219-2220
 221. 2220-2221

CARD 1

Mark ALL categories applicable to you.

6. If you are a Civilian Government Employee, enter your category and current pay grade.

7. Your Name.

Print the first ten letters of your last name and your first initial in these blank boxes.

Then fill in the corresponding response box below each letter.

8. ARE YOU: (Mark ALL applicable categories)

Active Duty or Retired Military
Spouse of Active Duty or Retired Military
1st, 2nd, 3rd, 4th, or 5th child of Active Duty or Retired Military
Not Applicable

9. Print your SSN in the blank boxes. Then fill in the corresponding response box below each number.

- If **ACTIVE DUTY** or **RETIRED** military, enter your **SSN**
- If a **FAMILY MEMBER** OF active duty or retired, enter sponsors **SSN**
- For **ALL OTHERS**, enter your **SSN**

CARD 3

23. CAR/TRK/VAN a. <table border="1" style="width: 100%; text-align: center;"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	23. MOTORCYCLE b. <table border="1" style="width: 100%; text-align: center;"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	23.a. In the next 12 months how many thousands of miles will you travel by car, truck or van? 23.b. In the next 12 months how many thousands of miles will you travel by motorcycle? <p style="text-align: center;">NOTE: U.S. average for cars is 10,000 miles</p>																														
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24. <input type="checkbox"/> Walk <input type="checkbox"/> Sub/Compact Car <input type="checkbox"/> Truck/Van <input type="checkbox"/> Bike <input type="checkbox"/> Mid or Full Car <input type="checkbox"/> Stay at Home <input type="checkbox"/> Motorcycle <input type="checkbox"/> Bus/Subway/Train		24. On a typical day how do you usually travel? (Mark only one)																																																																																																																																																																																																																																						
25. <table border="1" style="width: 100%; text-align: center;"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>		0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	25. What percent of the time do you usually buckle your safety belt when driving or riding? EXAMPLE: 50% <table border="1" style="width: 100%; text-align: center;"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9																																																																																																																																																																										
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26. <input type="checkbox"/> Within 5 MPH of limit <input type="checkbox"/> 11-15 MPH Over <input type="checkbox"/> 6-10 MPH Over <input type="checkbox"/> More than 15 MPH Over <input type="checkbox"/> Don't Drive		26. On the average, how close to the speed limit do you usually drive?																																																																																																																																																																																																																																						
27. NO. OF TIMES <table border="1" style="width: 100%; text-align: center;"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	28. NO. OF DRINKS <table border="1" style="width: 100%; text-align: center;"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	27. How many times in the last month did you drive or ride when the driver had perhaps too much alcohol to drink? 28. How many drinks of alcoholic beverages do you have in a typical week? NOTE: 1 Drink = 1 glass of wine or wine cooler = 1 can of beer = 1 shot of liquor = 1 mixed drink EXAMPLE: 2 DRINKS <table border="1" style="width: 100%; text-align: center;"> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> <tr><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td></tr> </table>	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9
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29. <input type="checkbox"/> Yes <input type="checkbox"/> No 30. <input type="checkbox"/> Yes <input type="checkbox"/> No 31. <input type="checkbox"/> Yes <input type="checkbox"/> No 32. <input type="checkbox"/> Yes <input type="checkbox"/> No 33. <input type="checkbox"/> Yes <input type="checkbox"/> No 34. <input type="checkbox"/> Yes <input type="checkbox"/> No 35. <input type="checkbox"/> Yes <input type="checkbox"/> No 36. <input type="checkbox"/> Yes <input type="checkbox"/> No 37. <input type="checkbox"/> Daily or almost daily <input type="checkbox"/> 3 to 5 days a week <input type="checkbox"/> Less than 3 days a week <input type="checkbox"/> Rarely or never 38. <input type="checkbox"/> Daily or almost daily <input type="checkbox"/> 3 to 5 days a week <input type="checkbox"/> Less than 3 days a week <input type="checkbox"/> Rarely or never		29. Have you ever felt you should cut down on your drinking? 30. Have people ever annoyed you by criticizing your drinking? 31. Have you ever felt bad or guilty about your drinking? 32. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (eye opener)? 33. Do your friends ever worry about your drinking? 34. Have you ever had a drinking problem? 35. Have you ever been told that you have diabetes (or sugar diabetes)? 36. Are you now taking medicine for high blood pressure? 37. How often do you eat two well-balanced meals per day? 38. How often do you eat foods high in salt or sodium such as cold cuts, bacon, canned soups, potato chips, etc...?																																																																																																																																																																																																																																						
39. <input type="checkbox"/> Not Satisfied <input type="checkbox"/> Somewhat Satisfied <input type="checkbox"/> Mostly Satisfied <input type="checkbox"/> Totally Satisfied <input type="checkbox"/> Not Applicable 40. <input type="checkbox"/> Money <input type="checkbox"/> Supervisor <input type="checkbox"/> No Problem <input type="checkbox"/> Social Life <input type="checkbox"/> Job <input type="checkbox"/> Family <input type="checkbox"/> Health		39. I am satisfied with my present job assignment and unit. 40. What causes the biggest problem in your life?																																																																																																																																																																																																																																						

<p>41. In the last year, how many serious personal losses or difficult problems have you had to handle (example, promotion passover, divorce/separation, legal or disciplinary action, bankruptcy, death of someone close, serious illness/injury of a loved one, etc.)?</p>	<p>41. <input type="checkbox"/> Several <input type="checkbox"/> Few <input type="checkbox"/> Some <input type="checkbox"/> None</p>
<p>42. In general, how satisfied are you with your life (e.g., work situation, social activity, accomplishing what you set out to do)?</p>	<p>42. <input type="checkbox"/> Not Satisfied <input type="checkbox"/> Somewhat Satisfied <input type="checkbox"/> Mostly Satisfied <input type="checkbox"/> Totally Satisfied</p>
<p>43. How often are there people available that you can turn to for support in bad moments or illness?</p>	<p>43. <input type="checkbox"/> Never <input type="checkbox"/> Hardly Ever <input type="checkbox"/> Sometimes <input type="checkbox"/> Always</p>
<p>44. How many hours of sleep do you usually get at night?</p>	<p>44. <input type="checkbox"/> 5 Hours or less <input type="checkbox"/> 6-8 Hours <input type="checkbox"/> 9 Hours or more</p>
<p>45. Have you seriously considered suicide within the last two years?</p>	<p>45. <input type="checkbox"/> Yes <input type="checkbox"/> Yes, within the last year <input type="checkbox"/> Yes, within the last 2 months <input type="checkbox"/> No</p>
<p>46. How often do you have any serious problems dealing with your husband or wife, parents, friends or with your children?</p>	<p>46. <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Seldom <input type="checkbox"/> Never</p>
<p>47. How often did you experience a major pleasant change in the past year? (for example, promotion, marriage, birth, award, etc.)?</p>	<p>47. <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Seldom <input type="checkbox"/> Never</p>
<p>48. How often has life been so overwhelming in the last year that you seriously considered hurting yourself?</p>	<p>48. <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Seldom <input type="checkbox"/> Never</p>
<p>49. In the past year, how often have you experienced repeated or long periods of depression?</p>	<p>49. <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Seldom <input type="checkbox"/> Never</p>
<p>50. In the past year, how often have your worries interfered with your daily life?</p>	<p>50. <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Seldom <input type="checkbox"/> Never</p>
<p>51. How often are you able to find times to relax?</p>	<p>51. <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Seldom <input type="checkbox"/> Never</p>
<p>52. How often do you feel that your present work situation is putting you under too much stress?</p>	<p>52. <input type="checkbox"/> Often <input type="checkbox"/> Sometimes <input type="checkbox"/> Seldom <input type="checkbox"/> Never</p>
TOBACCO USE HISTORY	
<p>53. How many cigars do you usually smoke per day?</p>	<p>53. <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/> 27 <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 31 <input type="checkbox"/> 32 <input type="checkbox"/> 33 <input type="checkbox"/> 34 <input type="checkbox"/> 35 <input type="checkbox"/> 36 <input type="checkbox"/> 37 <input type="checkbox"/> 38 <input type="checkbox"/> 39 <input type="checkbox"/> 40 <input type="checkbox"/> 41 <input type="checkbox"/> 42 <input type="checkbox"/> 43 <input type="checkbox"/> 44 <input type="checkbox"/> 45 <input type="checkbox"/> 46 <input type="checkbox"/> 47 <input type="checkbox"/> 48 <input type="checkbox"/> 49 <input type="checkbox"/> 50 <input type="checkbox"/> 51 <input type="checkbox"/> 52 <input type="checkbox"/> 53 <input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56 <input type="checkbox"/> 57 <input type="checkbox"/> 58 <input type="checkbox"/> 59 <input type="checkbox"/> 60 <input type="checkbox"/> 61 <input type="checkbox"/> 62 <input type="checkbox"/> 63 <input type="checkbox"/> 64 <input type="checkbox"/> 65 <input type="checkbox"/> 66 <input type="checkbox"/> 67 <input type="checkbox"/> 68 <input type="checkbox"/> 69 <input type="checkbox"/> 70 <input type="checkbox"/> 71 <input type="checkbox"/> 72 <input type="checkbox"/> 73 <input type="checkbox"/> 74 <input type="checkbox"/> 75 <input type="checkbox"/> 76 <input type="checkbox"/> 77 <input type="checkbox"/> 78 <input type="checkbox"/> 79 <input type="checkbox"/> 80 <input type="checkbox"/> 81 <input type="checkbox"/> 82 <input type="checkbox"/> 83 <input type="checkbox"/> 84 <input type="checkbox"/> 85 <input type="checkbox"/> 86 <input type="checkbox"/> 87 <input type="checkbox"/> 88 <input type="checkbox"/> 89 <input type="checkbox"/> 90 <input type="checkbox"/> 91 <input type="checkbox"/> 92 <input type="checkbox"/> 93 <input type="checkbox"/> 94 <input type="checkbox"/> 95 <input type="checkbox"/> 96 <input type="checkbox"/> 97 <input type="checkbox"/> 98 <input type="checkbox"/> 99 <input type="checkbox"/> 100</p>
<p>54. How many pipes of tobacco do you usually smoke per day?</p>	<p>54. <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/> 27 <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 31 <input type="checkbox"/> 32 <input type="checkbox"/> 33 <input type="checkbox"/> 34 <input type="checkbox"/> 35 <input type="checkbox"/> 36 <input type="checkbox"/> 37 <input type="checkbox"/> 38 <input type="checkbox"/> 39 <input type="checkbox"/> 40 <input type="checkbox"/> 41 <input type="checkbox"/> 42 <input type="checkbox"/> 43 <input type="checkbox"/> 44 <input type="checkbox"/> 45 <input type="checkbox"/> 46 <input type="checkbox"/> 47 <input type="checkbox"/> 48 <input type="checkbox"/> 49 <input type="checkbox"/> 50 <input type="checkbox"/> 51 <input type="checkbox"/> 52 <input type="checkbox"/> 53 <input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56 <input type="checkbox"/> 57 <input type="checkbox"/> 58 <input type="checkbox"/> 59 <input type="checkbox"/> 60 <input type="checkbox"/> 61 <input type="checkbox"/> 62 <input type="checkbox"/> 63 <input type="checkbox"/> 64 <input type="checkbox"/> 65 <input type="checkbox"/> 66 <input type="checkbox"/> 67 <input type="checkbox"/> 68 <input type="checkbox"/> 69 <input type="checkbox"/> 70 <input type="checkbox"/> 71 <input type="checkbox"/> 72 <input type="checkbox"/> 73 <input type="checkbox"/> 74 <input type="checkbox"/> 75 <input type="checkbox"/> 76 <input type="checkbox"/> 77 <input type="checkbox"/> 78 <input type="checkbox"/> 79 <input type="checkbox"/> 80 <input type="checkbox"/> 81 <input type="checkbox"/> 82 <input type="checkbox"/> 83 <input type="checkbox"/> 84 <input type="checkbox"/> 85 <input type="checkbox"/> 86 <input type="checkbox"/> 87 <input type="checkbox"/> 88 <input type="checkbox"/> 89 <input type="checkbox"/> 90 <input type="checkbox"/> 91 <input type="checkbox"/> 92 <input type="checkbox"/> 93 <input type="checkbox"/> 94 <input type="checkbox"/> 95 <input type="checkbox"/> 96 <input type="checkbox"/> 97 <input type="checkbox"/> 98 <input type="checkbox"/> 99 <input type="checkbox"/> 100</p>
<p>55. How many times per day do you usually use smokeless tobacco? (Chewing tobacco, snuff, pouches, etc.)</p>	<p>55. <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/> 27 <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 31 <input type="checkbox"/> 32 <input type="checkbox"/> 33 <input type="checkbox"/> 34 <input type="checkbox"/> 35 <input type="checkbox"/> 36 <input type="checkbox"/> 37 <input type="checkbox"/> 38 <input type="checkbox"/> 39 <input type="checkbox"/> 40 <input type="checkbox"/> 41 <input type="checkbox"/> 42 <input type="checkbox"/> 43 <input type="checkbox"/> 44 <input type="checkbox"/> 45 <input type="checkbox"/> 46 <input type="checkbox"/> 47 <input type="checkbox"/> 48 <input type="checkbox"/> 49 <input type="checkbox"/> 50 <input type="checkbox"/> 51 <input type="checkbox"/> 52 <input type="checkbox"/> 53 <input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56 <input type="checkbox"/> 57 <input type="checkbox"/> 58 <input type="checkbox"/> 59 <input type="checkbox"/> 60 <input type="checkbox"/> 61 <input type="checkbox"/> 62 <input type="checkbox"/> 63 <input type="checkbox"/> 64 <input type="checkbox"/> 65 <input type="checkbox"/> 66 <input type="checkbox"/> 67 <input type="checkbox"/> 68 <input type="checkbox"/> 69 <input type="checkbox"/> 70 <input type="checkbox"/> 71 <input type="checkbox"/> 72 <input type="checkbox"/> 73 <input type="checkbox"/> 74 <input type="checkbox"/> 75 <input type="checkbox"/> 76 <input type="checkbox"/> 77 <input type="checkbox"/> 78 <input type="checkbox"/> 79 <input type="checkbox"/> 80 <input type="checkbox"/> 81 <input type="checkbox"/> 82 <input type="checkbox"/> 83 <input type="checkbox"/> 84 <input type="checkbox"/> 85 <input type="checkbox"/> 86 <input type="checkbox"/> 87 <input type="checkbox"/> 88 <input type="checkbox"/> 89 <input type="checkbox"/> 90 <input type="checkbox"/> 91 <input type="checkbox"/> 92 <input type="checkbox"/> 93 <input type="checkbox"/> 94 <input type="checkbox"/> 95 <input type="checkbox"/> 96 <input type="checkbox"/> 97 <input type="checkbox"/> 98 <input type="checkbox"/> 99 <input type="checkbox"/> 100</p>
<p>EXAMPLE: 20 times <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/> 27 <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 31 <input type="checkbox"/> 32 <input type="checkbox"/> 33 <input type="checkbox"/> 34 <input type="checkbox"/> 35 <input type="checkbox"/> 36 <input type="checkbox"/> 37 <input type="checkbox"/> 38 <input type="checkbox"/> 39 <input type="checkbox"/> 40 <input type="checkbox"/> 41 <input type="checkbox"/> 42 <input type="checkbox"/> 43 <input type="checkbox"/> 44 <input type="checkbox"/> 45 <input type="checkbox"/> 46 <input type="checkbox"/> 47 <input type="checkbox"/> 48 <input type="checkbox"/> 49 <input type="checkbox"/> 50 <input type="checkbox"/> 51 <input type="checkbox"/> 52 <input type="checkbox"/> 53 <input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56 <input type="checkbox"/> 57 <input type="checkbox"/> 58 <input type="checkbox"/> 59 <input type="checkbox"/> 60 <input type="checkbox"/> 61 <input type="checkbox"/> 62 <input type="checkbox"/> 63 <input type="checkbox"/> 64 <input type="checkbox"/> 65 <input type="checkbox"/> 66 <input type="checkbox"/> 67 <input type="checkbox"/> 68 <input type="checkbox"/> 69 <input type="checkbox"/> 70 <input type="checkbox"/> 71 <input type="checkbox"/> 72 <input type="checkbox"/> 73 <input type="checkbox"/> 74 <input type="checkbox"/> 75 <input type="checkbox"/> 76 <input type="checkbox"/> 77 <input type="checkbox"/> 78 <input type="checkbox"/> 79 <input type="checkbox"/> 80 <input type="checkbox"/> 81 <input type="checkbox"/> 82 <input type="checkbox"/> 83 <input type="checkbox"/> 84 <input type="checkbox"/> 85 <input type="checkbox"/> 86 <input type="checkbox"/> 87 <input type="checkbox"/> 88 <input type="checkbox"/> 89 <input type="checkbox"/> 90 <input type="checkbox"/> 91 <input type="checkbox"/> 92 <input type="checkbox"/> 93 <input type="checkbox"/> 94 <input type="checkbox"/> 95 <input type="checkbox"/> 96 <input type="checkbox"/> 97 <input type="checkbox"/> 98 <input type="checkbox"/> 99 <input type="checkbox"/> 100</p>	
CIGARETTE SMOKING	
<p>56. How would you describe your cigarette smoking habits?</p>	
<p>56. <input type="checkbox"/> Never Smoked (SKIP TO QUESTION 58) <input type="checkbox"/> Current Smoker <input type="checkbox"/> Ex-Smoker</p>	
<p>57. STILL SMOKE</p>	<p>57. a. NUMBER b. YEARS c. AVERAGE</p>
<p>a. How many cigarettes a day do you smoke?</p>	<p>b. How many years has it been since you smoked cigarettes fairly regularly?</p>
<p>c. What was the average number of cigarettes you smoked per day during the two years before you quit?</p>	<p></p>
<p>58. About how long has it been since you had a rectal exam?</p>	<p>58. <input type="checkbox"/> Less than 1 year <input type="checkbox"/> 1 year <input type="checkbox"/> 2 years <input type="checkbox"/> 3 or more years <input type="checkbox"/> Never</p>
<p>59. When was the last time you visited the dental clinic for a check-up?</p>	<p>59. <input type="checkbox"/> Within the last year <input type="checkbox"/> Between one and two years ago <input type="checkbox"/> Over two years ago</p>

[illegible]

APPENDIX D

FORT DEVENS CIVILIAN FIT TO WIN PROGRAM

FORT DEVENS CIVILIAN FIT TO WIN PROGRAM

Course Itinerary

SESSION	ACTIVITY	LOCATION	TIME	REMARKS
Apr 15	Welcome Health Risk Assessment Results Intro to Wellness	Bldg 2602 Room 207	1100 - 1230	None
Apr 17	Intro to Fitness	Bldg 2602 Room 207	1100 - 1230	None
Apr 20	Cardiovascular Training	Bldg 2602 Room 207	1100 - 1200	Calculator
Apr 22	Lo Impact Aerobic Walking	Sports Arena Bldg. 620	1100 - 1200	Workout Clothes
Apr 24	Water Aerobics	Bunker Pool Bldg 621	1000 - 1100	Swim Suit & Towel
Apr 27	Advanced Nutrition & Label Reading	Bldg 2602 Room 207	1100 - 1200	Calculator
Apr 29	Body Sculpting Abdominals Stretching	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
May 1	Interval Training Walking	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
May 4	Weight Control thru Nutrition & Exercise	Bldg 2602 Room 207	1100 - 1200	Calculator
May 6	Lo Impact Aerobic Walking	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
May 8	Interval Training Walking	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
SESSION	ACTIVITY	LOCATION	TIME	REMARKS
May 11	Strength Training Techniques	Bldg 2602 Room 207	1100 - 1200	none
May 13	Water Aerobics	Bunker Pool Bldg 621	1000 - 1100	Swim Suit & Towel
May 15 (Fri.)	Nautilus - Grp A	Riggs II Bldg 1467	1300 - 1400	Workout Clothes

May 16 (Sat.)	Nautilus - Grp B	Riggs II Bldg 1467	0930 - 1030	Workout Clothes
May 18	Alcohol and Health	Bldg 2602 Room 207	1100 - 1200	None
May 20	Lo Impact Aerobic Walking	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
May 22	Body Sculpting	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
May 25	HOLIDAY - NO CLASS			
May 27	Health Risk Assessment - Grp A	Prev. Med. Bldg 681	1100 - 1230	Wk Clothes
	Int Trng - Grp B	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
May 29	Health Risk Assessment - Grp B	Prev. Med. Bldg 681	1100 - 1230	Wk Clothes
	Int Trng - Grp A	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
June 1	Fitness Assessment	Sports Arena Bldg 620	1100 - 1200	Workout Clothes
June 3	Fit to Win Olympics	Sports Arena Bldg 620	1100 - 1200	Workout Clothes & Street Shoes
June 5	Graduation Awards	Bldg 2602 Room 207	1100 - 1200	Wk Clothes

APPENDIX E

CONSENT FORM

Dissertation Title — Base Closure And Stress Management

You are being asked to participate in a research study which is primarily concerned with your experiences at Fort Devens base closure and stress. Your participation in this project is voluntary. As part of the study, I will conduct one in-depth interview with you which will be approximately 1-2 hours in length. It may be possible that a follow up interview will be needed which could be 30 minutes to two hours in length.

The interview will be audiotaped and transcribed. I will send a copy of the transcript for your review prior to engaging in final analysis of the material. This step will offer you the opportunity to withdraw any information from the transcript that you prefer not to be included in the analysis. You are free to withdraw consent and discontinue participation at any time from the actual interview process at any time without prejudice.

The information may be used in my dissertation, presentations to professional groups and other purposes related to my work as a researcher. In all written material and oral presentations in which I may utilize material from your interview, I will neither use your name, nor names of people mentioned by you. Every effort will be made to protect your anonymity. Aside from personal disclosure, there are no known risks associated with participation in this study.

Once the study is complete, an executive summary of the dissertation will be mailed to you. If you need to contact me at any time, please call me at (508) 796-3451.

In signing this form, you are agreeing to:

- (a) participate in this study
- (b) the use of materials from your interviews as stated above

In signing this form, you are also assuring me that you will make no financial claims for the use of the material from your interviewer.

I, , have read the above statement and agree to be interviewed under the conditions stated above.

Signature:

Thank you in advance for your time. Please return this consent form in the enclosed, self-addressed stamped envelope as soon as possible. I will contact you once I have received your response.

APPENDIX F
SYMPTOMS OF STRESS

Locke and Colligan (1986) identify the following possible indicators of excessive stress. Physical conditions of stress are headaches, high blood pressure, palpitations, disturbed sleep, loss of appetite, dry mouth, peptic ulcers, chest pain, diarrhea, grinding teeth, hyperventilation, backache, asthma, skin rashes, excessive sweating and hives. The psychological symptoms are depression, anger, inappropriate and excessive elation, rapid and dramatic mood changes and anxiety. Disturbed thinking takes the form of poor concentration, limited attention span, impaired memory, confusion, irrational fears, indecisiveness, self-consciousness, disorganization, and thoughts of injuring the self or others. Stress can also emerge as disturbed behavior. Changes in appearance and grooming, abnormal movements (restlessness, pacing, fidgeting, nail biting), abnormal speech (stuttering, halting, stammering) all indicate that the individual is operating under stress. Additionally, unhealthy habits such as drug and alcohol abuse, excessive coffee or tea consumption, cigarette smoking, and eating disorders also demonstrate stressfulness. Stress also affects family members, sometimes causing marital problems and behavioral problems for children in school and at home.

Goleman and Gurin (1993) have described stress symptoms that include some of those already named and add a few more to the extensive list. Cognitively there are anxious thoughts, fearful anticipation, poor concentration,

and difficulty with memory. The emotional symptoms are feelings of tension, irritability, restlessness, worries, inability to relax, and depression. Behaviors of stress are avoidance of tasks, sleep problems, difficulty in completing work assignments, fidgeting, tremors, strained face, clenching fists, crying, changes in drinking, eating or smoking. Physiologically there are stiff or tense muscles, grinding teeth, sweating, tension headaches, fainting, choking, difficulty in swallowing, stomach ache, nausea, vomiting, loosening of bowels, constipation, frequency and urgency of urination, loss of interest in sex, tiredness, shakiness or tremors, weight loss or gain, awareness of heart beat. Social symptoms range from withdrawal to seeking out other people; however, the quality of relationships usually decline under stress.

Brown (1984) provides additional examples of disturbances caused or aggravated by stress. There are emotional disturbances such as anxiety, insomnia, tension headaches, neuroses, phobias, hysterias, hypochondriasis, and a major factor in premature aging, sexual impotency, alcoholism, drug abuse, sleep disorders and learning problems. Abnormal behavior due to stress includes delinquency, hostility, underachieving, compulsive behaviors, cult addiction, obesity, vandalism, aggression, withdrawal, chronic unemployment, crime, battered child/spouse/parent syndrome, sexual deviation and suicide. Psychosomatic illnesses associated with stress are

hypertension, auricular arrhythmias, ulcers, colitis, asthma, chronic pain, acne, peripheral vascular disease, angina, bruxism and cardiac arrest. Stress can also cause exacerbation of organic illnesses like epilepsy, migraine headaches, herpes zoster, coronary thrombosis and rheumatic arthritis.

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